Organisational Learning: Managing Environmental Complexity and Change

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ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person. Nor does it contain material which to a substantial extent has been accepted for the qualification of any other degree or diploma of a university or other institution of higher learning, except where due recognition is made in the acknowledgements.

Natalie Claire White.

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"Great results cannot be achieved at once,
and we must be satisfied to advance in life as we walk,
step by step"
(Samuel Smiles, Scottish Biographer 1812-1904)

This quote helps to illustrate the process I have taken in compiling this thesis. Each stage has been a small step toward the thesis building process, but more importantly each step has been a lesson learned.

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ABSTRACT

This thesis presents an investigative analysis of organisational learning and addresses two key gaps evident within the literature:

1. Diversity of thought over what constitutes organisational learning
2. Lack of empirical study that authenticates the 'practice' of organisational learning

In examining these two gaps this thesis provides a synthesis of the fragmented literature, resulting in the development of five core tenets that together constitute organisational learning. Until now, this type of synthesis has never been undertaken.

The core tenets are then tested to address the question of whether organisational learning is practiced. This involved a Content Analysis of reports made by Senior Management in leading New Zealand organisations. A pragmatic approach was used in analysing this data, allowing for both quantitative and qualitative methods.

The chief finding of this study is that four of the five tenets of organisational learning are prevalent, to varying degrees, among the New Zealand organisations studied.

1.0 – INTRODUCTION

Approximately 400 years ago, Francis Bacon said, "Knowledge is Power". Centuries have passed, yet this statement could not be truer of the environment we live in today. Organisations operate within a fiercely competitive (macro) environment and knowledge is considered to be the difference between sustaining market position, or dying a sudden death (Pemberton & Stonehouse 2000, Nonaka 1991, Nonaka & Takeuchi 1995, Ayas 1996, Poell et al 2000).

New Zealand society acknowledges that we live within the realms of a 'Knowledge Economy', which "places great importance on the diffusion, and use of information and knowledge as well as its creation… driven by acceleration in the rate of change and the rate of learning" (OECD 1996:14). The emphasis on the Knowledge Economy has resulted in a "shift in economic orientation from obtaining value, by building tangible production resources and financial capital to investing in human resources and intellectual capital" (Davenport & Bibby 1999:431-462). This spotlight on knowledge and its link to society accentuates the apparent truth in Bacon's statement.

Interest in the generation and dissemination of 'knowledge' (Fulmer & Sashkin 1995, Pemberton & Stonehouse 2000) has increased significantly. The key reason for this is because of the perceived benefits from generating and sharing knowledge across an organisation. Knowledge is now believed to be imperative for today's organisations (Pemberton & Stonehouse 2000). Although a single organisation cannot control their macro environment, they are capable of learning from it (deGeus 1988, 1997, 1998), using past experiences and the knowledge gained, to help guide both current and future organisation efforts. Pemberton and Stonehouse (2000) believe that intentionally utilising the knowledge of individuals within the organisation is far more advantageous, and critical, than letting these sources of information lie dormant.

Rowden (2001:11-18) further highlights that organisations in today's business arena are no longer able to sufficiently forecast the future, which ultimately increases uncertainty. Therefore organisations need to "learn from their own experiences, to shift their mindsets, and to change more quickly, broadly, and deeply than ever before. In other words to become learning organizations".

There is clearly a need for organisations to learn and this is emphasised in the following quote:

> "When in the epoch of change, tomorrow is necessarily different from yesterday, and so new things need to be done - what questions need to be asked before solutions are sought?" (Revans 1982:64-75).

Revans (1982) suggests organisations need to learn by asking questions to address future actions. The idea is that if organisations cannot keep up with and predict change within the business world, they will surely be left behind. Therefore, organisations need to ensure they are the best they can be in these competitive times. To do so, they should continuously assess their practices and ask questions in order to prompt rational action.

DeGeus (1988) also supports the need for organisations to learn. Having conducted a study of 'corporate longevity' he determined the average life expectancy of most large organisations was less than 40 years. DeGeus concludes that this short expectancy illustrates the inability of many organisations to 'evolve'.

1.1 Organisational Learning in the Knowledge Economy

The significance of knowledge, in all probability, stems from an organisation's need to utilise its members experience and understanding in a bid to counteract the influences of the macro environment.

With an emphasis on knowledge generation and dissemination, organisational learning theory has come to the forefront of scholarly and practitioner philosophies.

Argyris and Schon developed the construct of learning in the 1970's. They saw a need for organisations to understand how to "diagnose and construct our experience, take action, and monitor our behaviour while simultaneously achieving our goals" and suggested that this was "crucial to understanding and enhancing effectiveness" (1974:xxxii).

Argyris and Schon began highlighting the importance of organisations understanding their actions, and in effect learning from them. This focus on understanding saw the introduction of the topic known as 'Organisational Learning' (O.L.). In 1978 they defined O.L. as "the detection and correction of error", proposing an organisation would 'detect' inefficiencies and try 'correcting' and resolving problem areas.

Since the 1970's O.L. has been the focus of much attention (Argyris & Schon 1996, Korth 2000) and a flood of literature has become available (Dixon 1994, Marquardt 1996, Senge 1990, Watkins & Marsick 1993, Korth 2000). Subsequently debates have sparked over whether O.L. is another management fad (Handy 1990, Fulmer & Bernard 1998), or the latest method enabling organisations to address key issues surrounding organisational efficiencies, competitiveness and sustainability (Poell et al 2000, Garratt 1999, Rieley 2001, Rowden 2001, Fulmer & Gibbs 1998, Pemberton & Stonehouse 2000).

Forces for change in the environment, which over time affect organisations (deGeus 1997, 1998, Poell et al 2000, Garratt 1999), are evidently a key factor relative to the acceleration of organisational learning. Campbell (1969) and Nelson & Winter (1982) expanded on the work of Darwin's ideology concerning evolution, adaptation, and natural selection and considered learning at organisation level "as a process in which whole organisations…adapt to changing environments by generating and selectively adopting organizational

routines". DeGeus (1997, 1998) shares this view believing organisations must adapt to change, and in fact prepare for change overtime, otherwise risk becoming obsolete.

It is apparent that competitive environments and the spotlight on knowledge is spurring the interest in 'learning'.

1.2 Disputes over Organisational Learning

With increased focus on organisational learning, theory has developed through the expansion of the original works of Argyris and Schon. Organisational learning is now considered to be the source of strategic change (deGeus 1988, Jashpara 1993) and the key to long-term performance (Stata 1989, Rowden 2001, Pemberton & Stonehouse 2000). Mintzberg et al (1998) argues that organisational learning is a 'breakthrough' within the business arena and should be an idea that is expanded upon and kept 'sustainable'. They surmise that organisational learning needs to expand and evolve with changing times.

With the limelight on organisational learning, distinguishable gaps have arisen that must be addressed to provide a more coherent overview of learning theory. Easterby-Smith et al (1999), Huber (1991) and Fiol and Lyles (1985) suggest:

1. that literature surrounding organisational learning is extremely fragmented which results in a lack of consistency and difficulty in understanding the topic.

Argyris and Schon (1996) add three further challenges surrounding the body of knowledge that need addressing:

2. Is O.L. paradoxical?
3. Is O.L. practiced?
4. Is O.L. beneficial?

These challenges have come about for several reasons and are fundamental to the body of knowledge surrounding organisational learning. Authors such as Handy (1990) and Fulmer and Bernard (1998) believe O.L. might be a

management fad. This view appears to stem from the challenge that O.L. is paradoxical, in that the idea of an organisation being able to learn, as an entity, is illogical.

Another of the challenges relates to O.L. literature being predominantly theoretical with little focus on whether or not organisational learning is practiced. This stems from the real lack of empirical evidence and also links into Easterby-Smith's argument over the fragmented nature of the literature. Consequently, there is a need to integrate existing ideologies and develop tenets of learning to build a more coherent representation of what constitutes organisational learning.

The last of Argyris and Schon's challenges concerns doubt over whether organisations that adopt a learning strategy benefit from doing so, again stemming from a lack of empirical studies that address this issue. This focus on evidence highlights the need to tackle organisational learning from an evidential perspective. The greater the empirical evidence, the greater the ability to prove or disprove arguments put forward within the literature. As Easterby-Smith et al (1999), Fiol and Lyles (1985) and Huber (1991) support, the lack of empirical evidence is a major issue. Easterby-Smith et al (1999:11) add "…the shortage of independent studies of organisational learning, which might take a critical and objective stance, is worrying".

The expansion of theory and its application to multiple disciplines means that these challenges have not been thoroughly explored. Until these gaps are bridged the theory of O.L. will remain more an idea than proven theory. As Senge (1998:33-43) advocates:

> "The idea of the learning organization has always been just that; an idea… The learning organization, technically speaking, has always been simply a vision, and as a vision it has a life of its own, so that the more reality evolves the more the vision should evolve. Its purpose is not to exist as an idea - its purpose is to be generative in the world. Unfortunately, this is not very widely appreciated".

Despite these challenges outlined by Argyris and Schon and Easterby-Smith et al, the key concept of O.L., 'learning as strategy' (Argyris & Schon 1996), is widely accepted (Argyris & Schon 1996, Argyris 1999, Korth 2000, Fulmer & Gibbs 1998). Through understanding past experiences and subsequent affect(s) upon the organisation, as well as a willingness to experiment and trial new experiences in order to learn from these, organisations can use 'lessons learned' (Korth 2000) to guide business decisions, thus define strategy. To do this, organisations need to exploit specific 'learning' tenets.

1.2.1 Gaps that need examination

The four challenges outlined above represent gaps within the body of knowledge.

Specifically, the key gaps identified are:

1. What are the tenets of O.L.? -Addresses the fragmented literature and the lack of consistency over what constitutes organisational learning.
2. Is O.L. a management fad / paradoxical? -Addresses whether organisations as an entity can in fact learn.
3. Is O.L. practiced? -Addresses rhetoric versus reality and the need for empirical evidence.
4. Is O.L. beneficial? -Addresses whether O.L. affects organisational performance or competitive advantage in a positive or negative way.

1.3 Exploratory Research and Theory Building

The overall approach to this thesis is that of exploratory study in order to build upon existing theory of organisational learning that comprises of many gaps and challenges. As Page and Meyer (2000) suggest, exploratory study allows the researcher to explore areas of theory that pose a problem, as well as areas of theory that are ambiguous. The gaps identified clearly show the need for research of this nature. By building upon the existing body of knowledge it is hoped that a more coherent depiction of organisational learning will be attained.

1.3.1 Research Objectives: Bridging the Gaps

To address all four gaps identified is beyond the scope of this thesis. Instead, this thesis aims to research the following:

Firstly, this thesis addresses the issue of the fragmented literature. There is a collective understanding that organisations need to implement learning strategies that consist of the use of various tools and processes (tenets). However, no comprehensive, logical list of tenets is available due to the application of O.L. theory to multiple disciplines that has resulted in the isolation rather than the amalgamation of tenets. What is unique about this study is that it synthesises existing ideologies within the literature to highlight what constitutes organisational learning, hence, identifies specific tenets of organisational learning.

Secondly, this thesis seeks to address the gap of whether organisational learning is actually practiced. It aims to do this by establishing a test to identify whether tenets of learning are prevalent amongst a sample of organisations.

This thesis does not address the gaps concerned with whether organisational learning is 'paradoxical' or 'beneficial'.

1.4 Thesis Outline

The structure of this thesis is determined by its scope. Firstly, with the need to address the fragmented literature and varied ideologies surrounding organisational learning, literature is reviewed and a synthesis of tenets performed (Chapter 2). Secondly, with the need to build upon theory by producing empirical evidence that either supports or rejects the 'practice' of organisational learning, testing will be carried out (Chapters 3 and 4).

Chapter 2 begins by explaining the notion and purpose of organisational learning before discussing its application to various scholarly and practitioner based disciplines. The chapter illustrates several definitions of organisational learning highlighting common themes before producing a working definition.

Ideologies are then explored in the build up to producing a comprehensive overview and synthesis of the tenets of organisational learning, inclusive of a model.

Chapter 3 specifies the research questions, both primary and secondary, that frame this thesis. The primary research question explores a key proposition outlined by Argyris and Schon that despite theory being accepted, there is doubt that organisational learning is actually practiced. The chapter then discusses the specific steps involved with the methodology of Content Analysis as well as describing data sources and the approach to analysis.

Chapter 4 presents the findings and discusses the evidence found relative to the research questions posed. It details evidence of each of the tenets before summarising the overall meaning of these results to the body of O.L. knowledge. The closing stage of the chapter presents research limitations and suggestions for further research.

Lastly, Chapter 5 summarises the key findings in regards to literature review and the results of the synthesis and testing processes. The implications of this study are also reviewed.

2.0 – LITERATURE REVIEW

The purpose of this chapter is to examine the literature surrounding the topic of organisational learning. The overall aim is to address its fragmented nature and produce a comprehensive yet straightforward overview of what constitutes organisational learning.

This chapter begins by outlining the purpose of organisational learning and investigating the application of this theory to a number of scholarly and practitioner disciplines. It then works towards producing a working definition of organisational learning, assisted by review of an expansive base of definitions found within the literature.

The chapter then explores various ideologies to address the secondary research question that asks what organisations need to include within their strategies in order to achieve organisational learning. It tackles this question through the synthesis of a broad spectrum of literature to produce a list of organisational learning tenets. The purpose of this exercise is to develop the basis for testing a sample of organisations for evidence of 'learning'. The chapter concludes with the establishment of a model of organisational learning.

2.1 Setting the Scene: The Purpose of Learning

The concept underlying organisational learning is that of learning at a level that influences the organisation as an entity. This is reflected in Argyris and Schon's work, specifically with the question they posed, "What is an organization that it might learn?" (1996:*xx*). This section examines the purpose of learning and outlines key propositions of 'how' organisational learning is achieved.

As introduced in Chapter 1, a lack of consistency throughout O.L. literature has resulted in the fragmentation of the topic. Consequently, varying reported purposes of organisational learning are found. There are suggestions that

learning is concerned with enabling an organisation to create competitive advantage (Pemberton & Stonehouse 2000, Rowden 2001, Fulmer & Gibbs 1998) to support adaptation to change, (deGeus 1997, 1998) improve organisational efficiencies (Rieley 2001) and increase overall performance (Pegels 1998).

Despite mixed 'purpose' there is a fairly consistent message found as to how 'learning' at entity level is accomplished. In an interview in 1998, Argyris suggested that an organisation is able to learn through the individuals employed within it. Therefore, an organisation must provide and create "contexts in which they enable these individuals to do Single or Double Loop Learning". He expressed that organisations have a key responsibility for creating "enabling contexts" as it is the "individual who has the skill or the competence to be enabled to do something" which creates "actionability".

Put more simply, the principal objective of organisational learning is to continually create 'new knowledge' (Pemberton & Stonehouse 2000) which assists organisations in making sense of values and ideas that underlie an organisation (Keischel 1990, Rowden 2001). By building upon the individuals' knowledge and understanding, the holistic organisation can aim to ensure that any action taken is objective rather than subjective (Ramsey & Sinha 2002).

Scholars such as Daft and Marcic (1998), Rowden (2001) and Senge (1998) support that 'learning' is created by individuals, "people working together to collectively enhance their capacities" (Senge 1998:33-43). It is conveyed that individuals responsible for "identifying and solving problems" enable the "organization to continuously experiment, change, and improve" (Daft & Marcic 1998:11-18) permitting the organisation, as an entity, to enhance current and future action(s).

Having established the varying purpose(s) of learning at organisation level, the next step is to examine O.L. and illustrate its application to various disciplines.

2.2 Organisational Learning: An Interdisciplinary Perspective

In 1978 a simple definition of O.L. was conceived by Argyris and Schon advocating O.L. as 'the detection and correction of error'. However, over time there have been many changes in the business world and this initial definition has been expanded. So too has the original work and concept of O.L. as introduced by Argyris and Schon. Since organisational learning first came to the forefront of business colloquy (Rowden 2001) various scholars have introduced new ideologies, examples being 'action learning' (Revans 1982), learning as an adaptation to change (deGeus 1988), and learning how to learn (Isaacs 1993, 1994). Each of these perspectives offers the reader an assortment of ideas concerning the concept of learning. For example Revans suggests that the key to learning is through questioning organisational processes, whereas deGeus believes that adaptability to the external environment is the basis for organisational learning.

This divergence of thought is further illustrated with Easterby-Smith's (1997) observation that organisational learning has been applied to six disciplines. These being Management Science, Organisation Theory, Strategy, Production Management, Cultural Anthropology and Psychology and / or Organisation Development, each discipline taking on board a slightly different perspective of organisational learning. For example, strategists deem that learning could in fact be the key to business success, learning giving an edge over competition (Easterby-Smith et al 1999). Production managers on the other hand, emphasise the importance of learning from experience to help improve the rate of productivity, whilst sociologists take the stance that learning and knowledge are a key factor relative to the dynamics and politics of the organisation (Easterby-Smith et al 1999).

Argyris (1999) recently added to the diverse nature of organisational learning identifying seven 'subfields' relative to organisational function, all of which again place different emphasis on 'learning'. These subfields are illustrated in table 2.1, which also highlights the emphasis, of each field, on learning.

Subfield:	Learning emphasis:
Socio-technical	Focus on collective participation by teams – responsible for the redesign of their work Requires management to create an enabling context
Organisational Strategy	Focus on competition and the implementation of plans
Production	Focus on continuous improvement and performance
Economic Development	Focus is on signal and response, the detection and correction of decline as well as behaviour
Systems Dynamics	Focus on systems thinking linked to organisational adaptation, with emphasis on the individuals potential and knowledge base
Human Resources	Focus is on human capability, training and development, personal change and the need for flatter management structures
Organisational Culture	Focus is on encouragement, personal responsibility for learning and the assumptions and values held

Table 2.1 The Focus on Learning according to 'Organisational Function' (Source: Adapted from Argyris, C. (1999). On Organizational Learning. Blackwell Publishers)

It appears the interest in learning and the perception of what can be gained from learning at organisational level, has meant people from different disciplines have taken great interest in the topic of organisational learning. Although the subfields identified by Argyris (1999) relate to the functions of an organisation they are not too dissimilar from the disciplines identified by Easterby-Smith (1997). Moreover, despite the multidisciplinary application of organisational learning, each of the disciplines listed above fit within two broader, distinctive schools of thought. These are known as the Scholarly and Practitioner perspectives, sometimes referred to as Organisational Learning versus the Learning Organisation.

2.2.1 Scholarly Perspective: Organisational Learning

Scholars refer to the theory of learning within an organisation as 'Organisational Learning' (Argyris & Schon 1996, Easterby-Smith et al 1999), and focus on the process and mechanisms of learning (Easterby-Smith et al 1999). Literature is theoretically based and lacks empirical evidence.

According to Argyris and Schon (1996:180) literature on O.L. is "predominantly sceptical…produced by academics". Easterby-Smith et al (1999:2) expands on this advocating "the literature on O.L. has concentrated on the detached

observation and analysis of the processes involved in… collective learning inside organizations".

The propositions throughout O.L. literature are characterised by three 'challenges' that Argyris and Schon (1996) put forward:

1. Is O.L. paradoxical?
2. Is O.L. practiced?
3. Is O.L. beneficial?

These fundamental challenges are attributed to the issue highlighted by Easterby-Smith et al (1999), Huber (1991) and Fiol and Lyles (1985) regarding the fragmented nature of organisational learning literature. Subsequently, there is a lack of coherence, lack of empirical evidence, and lack of application of O.L. theory. Each of these challenges is briefly outlined below.

Those that believe the idea of O.L. is 'contradictory', 'paradoxical' or 'devoid of meaning' stem from the argument that organisations, as an entity, are only able to learn due to the role individual members take within the organisation. It is the responsibility of the individual to learn, and to pass on this 'knowledge' to others, similar to the domino affect, rather than the organisation as an entity learning as an entity. It is evident that the role of the individual relative to learning at organisation level is very much questioned. This results in the underlying belief that 'lessons learned' by the 'individual' are not sufficient enough to warrant organisational learning.

In summary, O.L. is probably found to be contradictory because of the many questions that remain unanswered due to a lack of empirical studies. For example Easterby-Smith et al (1999) claimed that of 150 papers covering the topic of organisational learning in 1997, only 15 were empirically based. They go on to say, "there is a particular shortage of studies that attempt to induce theory from existing practice, use a small sample of in-depth cases, focus on micro-practices within organizational or trans-organizational settings, and study processes leading to learning outcomes" (1999:11).

The next challenge relates to 'whether in principle and actuality' (Argyris & Schon 1996) organisations are capable of learning, linked to a key proposition within the literature concerned with rational action. The focus on rational action stems from whether organisations can "remember past events, analyse alternatives, conduct experiments, and evaluate the results of action" (Argyris 1999:11) as to ensure the best course of action prevails. Again, learning at organisational level is doubted, as there is lack of evidence to endorse O.L. theory.

The final challenge that Argyris and Schon (1996) identify is the issue of learning as 'beneficial', which stems predominantly from an organisation's need to perform. Several authors link O.L. to increased performance (Poell et al 2000, Garratt 1999, Rieley 2001, Rowden 2001), but are they right to do so? A key argument within the literature, stemming from the work of Fiol and Lyles (1985) and Levitt and March (1988), is that organisations are far more likely to try to 'preserve status quo', and that in fact this is what organisations as an entity have learnt to do. However, this is a bone of contention because preserving 'status quo' contradicts the theory of O.L. that supports continuous change and development, definitely not 'status quo'.

The question as to whether O.L. is beneficial again appears to be a matter of rhetoric versus reality, with little evidence to back up theory. This again highlights the contradictory and fragmented nature of the literature, as it cannot be determined whether O.L. is beneficial if there is still debate amongst scholars as to whether O.L. is in fact 'practiced'. This is fuelled further by a lack of consistent argument over what organisational learning actually is.

2.2.2 Practitioner Perspective: Learning Organisation

Practitioners refer to organisational learning as the 'Learning Organisation' (L.O.) (Argyris & Schon 1996, Easterby-Smith et al 1999). They focus on the development of practices that assist the learning process (Easterby-Smith et al 1999) and the literature is more practical, stemming predominantly from the

field of consultancy (Easterby-Smith et al 1999, Argyris 1999, Argyris & Schon 1996).

Easterby-Smith et al (1999:8) point out "…the learning organization literature is not devoid of theory; it draws very heavily from ideas developed within organizational learning but it is selective on the grounds of utility". They go on to say that the literature on L.O. concerns the "nature and processes of learning (and unlearning) within organizations". This is also supported by Argyris and Schon (1996:6) advocating learning organisation literatures offer "prescriptions that are useful at least as guides to the kinds of organizational structures, processes and conditions that may function as enablers of…learning".

The L.O. literature is predominantly characterised by authors who put forward particular strategies and ideas, even complex frameworks, which they believe enable an organisation to implement strategies that promote learning. Some of these key arguments are described below.

Argyris (1999) believes L.O. is surrounded by notions of organisational 'adaptability' and 'flexibility', as well as their 'propensity to experiment'. He also talks of the organisations 'readiness to rethink means and ends', the need to encourage 'inquiry', and the need for tapping into 'human potential' by ensuring the organisation provides supportive settings for employee development. This argument is supported by much of the key literature.

Organisational adaptability, according to deGeus (1997, 1998) is key to 'corporate longevity', a chief proposition being that unless organisations are able to adapt to the external environment they are less likely to survive in the long term. DeGeus (1988) found that of the Fortune 500 companies he studied, one third of these companies perished within a fairly short time span.

Experimentation was key to the studies produced by Revans (1983, 1994) on 'Action Learning'. He suggested that for an organisation to learn it must be

concerned with continuously asking new questions to generate new knowledge and new lessons (Revans 1998). The idea is then to apply this 'new knowledge' to the organisation to assist with business decisions and future direction.

To summarise, L.O. is predominantly concerned with the outcomes experienced by an organisation after a specific process or strategy has been implemented (Easterby-Smith et al 1999).

Literature on L.O. is typified by six practitioner-based characteristics (Argyris & Schon 1996) such as:

- "Flat, decentralised organizational structures
- Information systems that provide fast, public feedback on the performance of the organization as a whole and of its various components
- Mechanisms for surfacing and criticizing implicit organizational theories of action, cultivating systematic programs of experimental inquiry
- Measures of organizational performance
- Systems of incentives aimed at promoting organizational learning, and
- Ideologies associated with such measures, such as total quality, continuous learning, excellence, openness, and boundary crossing".

Easterby-Smith et al (1999) and Tsang (1997) conclude that L.O. is action orientated and leans more toward providing specific tools that help an organisation pinpoint and examine processes that constitute learning.

However, those who offer prescriptions on how to learn add to the issue of fragmentation as each author is influenced by his or her discipline. Easterby-Smith et al (1999:10) supports this concern, advocating "…there is a consistent concern among writers on the learning organization to understand why the concept is so difficult to implement. This has lead pragmatically to interest in a wide range of implementation techniques and strategies…".

2.2.3 Scholarly and Practitioner Perspectives Compared

Despite this divide between scholars and practitioners it is important to emphasise that the basic concept of learning, using experience(s) to guide future action(s), remains the same (Argyris & Schon 1996). However, this divide is often the cause of debate due to the discrepancy of thought between scholars and practitioners (Argyris & Schon 1996) and their basic inability to agree with each other.

Argyris (1999:1) expands on this separation between scholars and practitioners, advocating supporters of L.O. perceive learning to include "notions of organizational adaptability, flexibility…propensity to experiment, readiness to rethink means and ends, inquiry orientation, realisation of human potential for learning in the service of organizational purposes, and creation of organizational settings as contexts for human development". Whereas supporters of O.L. are "intentionally distant from practice, non prescriptive, and value neutral" (Argyris 1999:7).

The main differences between O.L. and L.O. are summarised in figure 2.1. This figure demonstrates that despite the divide between scholars and practitioners, who talk of organisational learning using different terminology, the basic concept of learning remains the same. Argyris (1999:14) proposes that both O.L. and L.O. are concerned with the potential ability of organisations to "draw valid and useful inferences from experience and observation and to convert such inferences to effective action".

	O.L.	L.O.
Audience:	- predominantly scholarly	- predominantly practitioner based, specifically from consultancy
Focus:	- concentrates on process	- concentrates on prescriptions & utility
Level:	- collective learning	- individual (solitary) learning
Fundamental Concept:	Use experience(s) to guide action(s)	Use experience(s) to guide action(s)

Figure 2.1 Distinctions between O.L. and L.O. and a Shared Concept

In effect, it is a simple argument between those who theorise and those who consider themselves to practice. The two perspectives imply they are different but in fact they both boil down to a shared basic concept of learning. This shared concept of learning has meant that throughout much of the literature the terms O.L. and L.O. are used interchangeably. As Easterby-Smith et al (1999:2) suggest, "theorists of learning organization have often drawn on ideas from organizational learning", this emphasising the interconnectedness of the two fields. As Easterby-Smith in 1997 suggested, the "plurality of perspectives should be seen as a strength" (Easterby-Smith et al 1999:1).

The fields of O.L. and L.O. are evidently linked (Argyris & Schon 1996) by the basic concept of learning, concerned with the "capability of real-world organizations to draw valid and useful inferences from experience and observation and to convert such inferences to effective action" (Argyris 1999:14). Thus, it is important to examine both Organisational Learning and Learning Organisation literatures for this thesis. The rationale being that O.L. literature supports the challenges this thesis aims to address whereas L.O. literature contains elements relative to the tenets of learning. Specifically, L.O. literatures are strategy orientated whereas its O.L. counterparts are process orientated.

2.2.4 Criticisms of O.L. and L.O.

Scholars consider L.O. literature based on practitioner prescriptions to have various flaws. They suggest that practitioners, who offer 'prescriptive strategies', ignore or pay little consideration to how these strategies are implemented (Argyris 1999) and how the learning process actually occurs.

Another flaw is highlighted by Argyris (1999) who asserts that L.O. neglects the key challenges highlighted by O.L. theory. For example, as discussed, there is question as to whether organisations can in fact learn (Argyris & Schon 1996), yet the majority of L.O. literature disregards this concern and continues to offer learning prescriptions and strategies.

In summary, many articles on L.O. convey a learning strategy but disregard implementation procedure. Subsequently, without addressing the challenges outlined, the field of L.O. will remain generalised until further research provides a resolve to the discrepancies scholars believe L.O. to contain.

Just as L.O. is criticised by scholars, practitioners have likewise identified flaws in O.L. theory. Practitioners concerns predominantly relate to the fragmented field of O.L. that lacks 'integration' of theory and practice (Easterby-Smith et al 1999, Prange 1996). In other words, O.L. theory has become too broad and offers little support as to how 'learning' may be practiced.

Further criticism comes from practitioners discussing the outcomes of learning who take issue with the 'desirability' of O.L. (Argyris 1999). They dispute the way in which organisations are said to learn by scholars (Argyris 1999, Easterby-Smith et al 1999) who consistently talk of rational and calculated behaviour. Practitioners take this view, as they believe that this kind of behaviour is not always possible in the real world (Easterby-Smith et al 1999).

In spite of all the criticisms found within O.L. and L.O. literatures there is evidence that these terms are used interchangeably, with writers consistently crossing the boundaries of disciplines (Argyris 1999).

Despite the proposed discrepancies, these fields are linked by the basic concept of learning. It is because of this interconnectedness that the researcher draws on both literatures. Keeping these separate has no benefit to this thesis. Therefore, when O.L. is referred to throughout the thesis it is representative of both scholarly and practitioner perspectives of 'learning'.

2.3 Organisational Learning and Learning Organisations: Toward a Definition

As discussed in Chapter 1, there are varying reasons why O.L. is considered an important aspect in today's business arena. In today's fiercely competitive environment, learning as an entity is considered by some to be a necessity for survival (Fulmer & Gibbs 1998, Pemberton & Stonehouse 2000, Poell et al 2000, Garratt 1999). Fulmer & Gibbs exemplify this point saying, "no organization can afford to be - or admit to be - an organization that isn't interested in learning. Yet many continue not to make learning a priority required for long term success" (1998:6-15).

In spite of theory being multidisciplinary and fragmented Argyris (1999:xiii) believes that organisation learning is "a competence that all organizations should develop".

As discussed earlier in the chapter there are differences in opinion over the purpose of organisational learning. This becomes increasingly evident when searching for a universal definition within the literature. Senge (1998:33-43) advocates "no true, single definition can exist" and that the subject of organisational learning will remain a "growing, evolving thing".

Subsequently, literature is full of diverse definitions, some being fairly self-explanatory and others that offer little explanation and leave the reader perplexed. As this thesis seeks to integrate the key aspects of this literature, key definitions of organisational learning must be explored before developing a working definition that will be employed throughout the remainder of this thesis.

The differing and multifaceted perspectives of organisational learning are illustrated in table 2.2 overleaf. The table identifies from what thread of literature the definition originates, as well as singling out the fundamental concepts of each definition to help illustrate what constitutes learning.

Table 2.2 A Collection of Organisational Learning Definitions

Author:	Thread:	Definition:	Key Concepts:
Keischel (1990:133)	L.O.	"The notion of the learning organisation is… a very big conceptual catchall to help us make sense of a set of values and ideas we've been wrestling with, everything from customer service to corporate responsiveness and speed"	▪ Understanding ▪ Performance
Argyris (1999:1)	O.L.	The Learning Organisation "includes notions of organizational adaptability, flexibility…propensity to experiment, readiness to rethink means and ends, inquiry orientation, realization of human potential for learning…"	▪ Adaptation ▪ Flexibility ▪ Experimentation ▪ Analysis ▪ Action
Pemberton & Stonehouse (2000:4-14)	O.L.	"The principal objective of Organisational Learning is to continually create 'new knowledge'". This permits the organisation to "respond, adapt or change with, their dynamic operating environments".	▪ Knowledge ▪ Action
Jackson (1993) In: Pemberton & Stonehouse (2000:184-194)	O.L.	"Implies that the learning process is complex, based on reasoning" which draws from 'experience', 'experimentation', 'actions' and 'analysis'.	▪ Experience ▪ Experimentation ▪ Action ▪ Analysis
Daft & Marcic (1998) In: Rowden (2001:11-18)	L.O.	"The learning organization can be defined as one in which everyone is engaged identifying and solving problems, enabling the organization to continuously experiment, change and improve, thus increasing its capacity to grow, learn, and achieve its purpose".	▪ Problem solving ▪ Experimentation ▪ Continuous Improvement
Garvin (1993) In: Kotnour (1999:32-38)	L.O.	A learning organisation is "an organisation skilled at creating, acquiring, and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights".	▪ Knowledge ▪ Behaviour Modification ▪ Reflection
Fiol & Lyles (1985) Levitt & March (1988) In: Argyris (1999:7)	O.L.	Define learning as "the process of improving actions through better knowledge and understanding". Organisations learn when they use experiences to determine and guide behaviour.	▪ Action ▪ Knowledge ▪ Understanding
Huber (1989) In: Argyris (1999:7)	O.L.	"An organisation has learned if any of its components have acquired information and have this information available for use".	▪ Knowledge
Wijnhoven (1995) and Easterby-Smith (1997)	O.L.	Organisations that survive for a lengthy period of time must have learned.	▪ Experience ▪ Evolution
Pegels (1998:2.1)	O.L.	"The notion of Organizational Learning is essentially based on individual learning, and… application of OL will benefit the long term performance of the organization…Learning in an organization occurs when an organization continuously implements new ideas and practices tested by experience, and transforms that experience into knowledge".	▪ Performance ▪ Experience ▪ Knowledge
Senge (1990:3)	L.O.	A learning organisation is "an organisation that is continually expanding its capacity to create its future… a place where people…are continually learning how to learn together".	▪ Continuous Improvement ▪ Knowledge ▪ Understanding
Hitt (1995) In: Pegels (1998:3.1-3.13)	L.O.	"Learning involves continually expanding the organizations capacity to do things efficiently and effectively".	▪ Performance ▪ Continuous Improvement

On examining the concepts of each definition it is evident that there are in fact many similarities amongst them. For example, of the 12 definitions displayed, 4 of them include 'action' as a key concept of learning and 6 include 'knowledge', illustrating that although definitions vary, themes can consistently be found. These themes are illustrated in Figure 2.2, a radar graph that highlights the common and not so common features of these definitions.

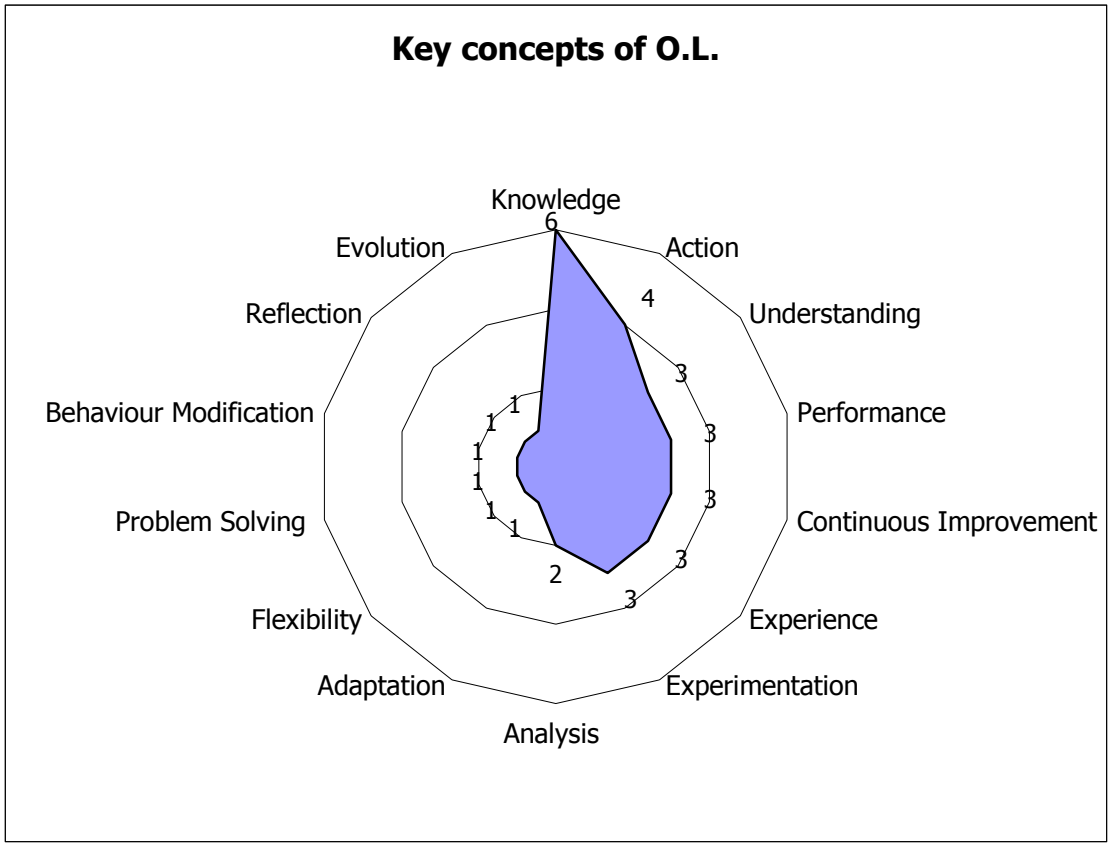


Figure 2.2 Common themes amongst Organisational Learning Definitions

2.3.1 Cohesion of O.L. theory: Is it possible?

With various definitions across several disciplines it is difficult to get a clear and cohesive picture of organisational learning theory. As Easterby-Smith et al (1999:1) contend, "representatives of different disciplines now vie over who has the correct model of organizational learning".

The following quote depicts the evolution of the topic of organisational learning and shows how it is possible for various definitions and applications of O.L. to

exist due to the diversity, fragmentation and multidisciplinary nature of the literature.

> "O.L. derives from Argyris's work in Organizational Learning (Argyris & Schon 1978) and is indebted to Revans (1983) studies of Action Learning. It has roots in Organisation Development and Organisation Theory. Its conceptual foundations are firmly based on systems theory (Senge 1990) and its practical application to managing a business has evolved out of strategic planning and strategic management (Fiol & Lyles 1985, Hosley, Lau, Levy & Tan 1994) which have recognised that Organisational Learning is the underlying source of strategic change (deGeus 1988, Jashapara 1993)" (Rowden 2001:11-18).

The multiple definitions, purposes and propositions within organisational learning theory have created a literature that is fragmented and a little incoherent. Unfortunately, theory is not likely to become more sound unless a specific model of O.L. is produced that satisfies each school of thought.

Table 2.2 is therefore significant in the fact that it reviews both O.L. and L.O. threads of literature and identifies common underlying themes. In examining these themes a working definition of learning arises:

> *Organisational learning is the ability of an organisation, as an entity, to utilise the knowledge and experience of its members in an attempt to experiment with, and continuously improve its actions. The organisation should understand the consequences of its actions as a means of improving performance, relative to the processes and construct of the organisation, and support and promote the learning concept.*

This definition, comprising of the key themes uncovered, provides a more concise overview of organisational learning.

2.4 Towards a Synthesis of Learning Tools

Having defined organisational learning, the next aim of this thesis is to review the literature and determine the tenets considered a requisite for learning. To date, no clear-cut compilation or synthesis of tenets is readily available, so

literature has been reviewed and key information extracted (namely tools and strategies) to produce five core tenets.

It is accepted throughout O.L. theory that to learn, an organisation must implement strategies and tools that help to promote and support the learning process. The most commonly found strategies and tools throughout the literature include a strong, cohesive culture, clear communication both vertically and horizontally across an organisation, and an emphasis on planning and analysis (Fulmer & Gibbs 1998), amongst others. All of these proposing to support and encourage the acquisition of 'knowledge'. The underlying proposition is to enable organisations to make, in theory, beneficial decisions regarding their future (Fulmer & Gibbs 1998, Argyris & Schon 1996, Garratt 1999, Rieley 2001, Rowden 2001, Pemberton & Stonehouse 2000).

To produce a list of tenets, key information was extracted from over thirty literature sources, predominantly journal articles. The result of the review and extraction process was a lengthy list of approximately forty tools and strategies. Combining repetitious material and producing categories, into which many of the tools correspond, narrowed this list down to five core tenets of organisational learning. The process involved in amalgamating key information from literature to develop these five tenets is detailed in the pages that follow, but in brief the tenets are:

1. Organisation Diagnosis
2. Challenge Underlying Assumptions
3. Continuous Analysis of Practices / Actions
4. Emphasise Learning Values
5. Challenge the Learning Process

These tenets constitute organisational learning. The significance of these tenets is illustrated by the Center for Managerial Learning and Business Simulation that published a recommended mission statement for organisations wishing to 'learn'.

> "The world changes and we cannot stop it, our products will change, our markets will change, our customers will change, and some of our employees will move on…But these things will not change- We will learn faster than our competitors, we will learn across our organisation from each other, and from teams. We will learn externally from our suppliers and our customers, we will learn vertically from top to bottom of our organisation. We will ask the right questions and use action learning. We will anticipate the future and create scenarios to learn from it, we will practice what we learn, and learn from practice. We will learn faster than our environment changes…Therefore we will survive and prosper".

This statement illustrates key aspects to be considered when examining organisational learning. Firstly, the statement deals with forces for change and insinuates that change should be accepted as constant. The statement then introduces the idea of learning within the organisation, utilising the knowledge of its members and outside parties. It also suggests that organisations should think futuristically and forward plan. In summary, the more the organisation can structure itself to deal with change, the better its chances of sustainability.

The underlying message within this mission statement links closely to the tenets identified. It suggests that if organisations are to learn they must accept change. Furthermore, it proposes that organisations must ensure that they implement a strategy that encompasses their attitude and values linked to learning, and be willing to examine and modify practices as well the construct of the organisation.

2.4.1 The Construction of Tenets: The Extraction Process

The five tenets outlined above were compiled by extracting fundamental information on various components of learning such as strategies, prescriptions, tools and processes from approximately 35 key articles. The extraction process produced approximately forty tools of which many were similar enabling them to be grouped within broader categories.

The tables that follow help illustrate this categorisation process. The first column on each of the tables identifies key components, uncovered from reviewing the literature. These are then fused where possible into broader

categories. In amalgamating the broad concepts the categorisation process arrives at a single tenet. Some tools feature within several of the tables, as they were applicable to more than one tenet.

▪ Impact analysis	▪ Identify gaps, strengths and weaknesses	**Tenet 1: Organisation Diagnosis**
▪ Knowledge management & mapping		
▪ Building new competencies		
▪ Assess structure	▪ Internal assessment of procedure and process	
▪ Assess infrastructure		
▪ Systems thinking		

Table 2.3 Constructing Tenet 1 – Organisation Diagnosis

▪ Adaptation to change	▪ Reactive to stimuli	▪ Single Loop Learning	**Tenet 2: Challenge Underlying Assumptions**
▪ Learn to evolve			
▪ Interaction with external environment			
▪ Solving problems	▪ Remedial action		
▪ Strategic planning	▪ Proactive towards future action	▪ Double Loop Learning	
▪ Delphi method			
▪ External management development			
▪ Take a capacity building perspective			
▪ Action Learning – prior experience and new knowledge creation			
▪ Plan, Do, Study and Act cycle			
▪ Organisational flexibility	▪ Readiness and flexibility		
▪ Constant readiness toward change			
▪ Interaction with external environment			

Table 2.4 Constructing Tenet 2 – Challenge Underlying Assumptions

▪ Action Learning – prior experience and new knowledge creation	▪ Continuous planning	▪ Before taking action	**Tenet 3: Continuous Analysis of Practices / Actions**
▪ Scenario planning			
▪ Merlin exercise			
▪ Continuous planning			
▪ Plan, Do, Study & Act cycle			
▪ Advisory groups	▪ Knowledge sharing and dissemination		
▪ Knowledge management & mapping			
▪ Deeper levels of communication			
▪ Reflection			
▪ Shared visions			
▪ Customer surveys			
▪ Maintenance tools	▪ Continuous planning	▪ During implementation of action	
▪ Crossover tools			
▪ Merlin exercise			
▪ Scenario planning			
▪ Continuous experimentation	▪ Experimentation		
▪ Action Learning – prior experience and new knowledge creation			
▪ Practice fields			
▪ Improvised implementation			
▪ Plan, Do, Study & Act cycle			
▪ Knowledge management & mapping	▪ Knowledge sharing and dissemination		
▪ Dialogue			
▪ Deeper levels of communication			
▪ Merlin exercise	▪ Continuous planning	▪ After taking action	
▪ Scenario planning			
▪ Continuous planning			
▪ Plan, Do, Study & Act cycle			
▪ Knowledge management & mapping	▪ Knowledge management and dissemination		
▪ Deeper levels of communication			
▪ Reflection			
▪ Action Learning – prior experience and new knowledge creation			
▪ Dialogue			
▪ Lessons learned			

Table 2.5 Constructing Tenet 3 – Continuous Analysis of Practices / Actions

▪ Personal mastery ▪ Transferring innovations ▪ Dialogue ▪ Knowledge management and mapping ▪ Infrastructure assessment ▪ Deeper levels of communication	▪ Emphasis on communication systems – assessment of infrastructure	**Tenet 4:** **Emphasise Learning Values**
▪ Structure assessment ▪ Decrease autocracy ▪ Knowledge sharing	▪ Emphasis on flatter organisational structure – assessment of structure	
▪ Creative orientation ▪ Importance of trust ▪ Continuous experimentation ▪ Organisational flexibility ▪ Improvised implementation ▪ Learning islands	▪ Emphasis on supportive culture – assessment of culture	
▪ Empowerment ▪ Responsibility for learning ▪ Mentoring ▪ Coaching	▪ Emphasis on servant leadership – assessment of leadership	

Table 2.6 Constructing Tenet 4 – Emphasise Learning Values

▪ Learning about learning ▪ Differentiating between espoused theory and theory in use ▪ Lessons learned	▪ Emphasis on understanding how the organisation actually learns	**Tenet 5:** **Challenging the Learning Process**

Table 2.7 Constructing Tenet 5 – Challenging the Learning Process

The development of five tenets illustrates that despite the fragmented literature it is possible to interlink concepts and bring together ideas to form a coherent representation of what constitutes organisational learning.

It is important to note that there is no specific ground within the literature that suggests organisations that adopt O.L. need to apply all tenets to become 'learners'. Instead, these tenets should be seen as representative of organisational learning.

The interconnectedness of each tenet is reflected in the following diagram that illustrates how each tenet is interlinked to others to constitute organisational learning.

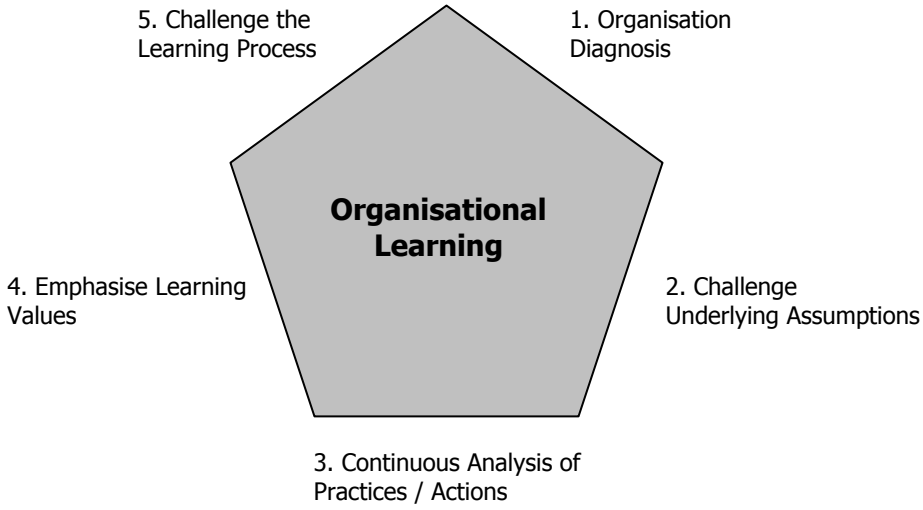


Figure 2.3 Interconnectedness of Tenets that Constitute Organisational Learning

Each of these tenets will now be explored in greater detail illustrating its key concepts and link to organisational learning.

2.5 Exploring the Tenets of Learning

The following section defines each of the five tenets, examining the concept of each tenet and the key information, namely tools and processes, which helped to develop it. Some of the processes and tools are well known, but as Fulmer and Gibbs (1998:6-21) suggest, "we will see existing learning tools used more often for new purposes".

2.5.1 Tenet 1 – Organisation Diagnosis

> "At the outset of the journey, the organization would scan the horizon and spot the summit…It would set a goal and develop a precise road map to achieve its end target…Storms of crisis might obscure the final destination now and then" (Rowden 2001:11-18).

Rowden (2001) highlights the importance of diagnosis relative to making strategic plans and accepting that these plans might alter due to changes within the external environment.

Diagnosis is straightforward and often discussed throughout management texts. It is the first tenet of the five due to rationale that suggests for an organisation to learn it must first define where it currently stands relative to where it ought, or desires, to be.

As Llewellyn (2002) describes, diagnosis is similar to giving the organisation a health check, and that 'prescribing' or providing a solution without firstly fully understanding what is going on would be 'malpractice'.

So the first logical step for an organisation should be to diagnose itself including its position within the market place. This involves, as Rafferty and Griffin (2001:3-14) suggest, "the systematic collection of data to determine the current state of an organization…developing road maps to guide and direct organizational change". So to understand its current state, the organisation must review and analyse its practices. According to Llewellyn (2002:79-83) this should involve examining eight specific areas linked to organisational effectiveness, including strategic direction, goal alignment, work process, organisational structure, performance management, rewards, cultural support systems and infrastructure.

In reviewing each of these areas the organisation is able to build up a picture of its strengths and weaknesses, and as McIntire (1999:786-789) suggests, "…focus on the ineffective features that need improvement" as well as try to identify "…their likely causes". In doing this, the organisation gets an 'holistic view' of its current position in comparison to how it desires to be (Belanger 2000). This essentially is similar to that of a gap analysis and allows the organisation to identify both problem areas as well as areas of strength. This guides the organisation towards building upon its strengths and lessening its weaknesses (Yarrow & Prabhu 1999), with the aim of closing the gaps between current and desired states.

The significance of diagnosis relative to learning is high. When organisations examine their strengths and weaknesses and discover the gaps between their

current and desired states, it stimulates the organisations' "desire and ability to learn and improve" (Yarrow & Prabhu 1999:793-802).

What is also significant about diagnosis is that throughout much of management literature, organisations have been renowned for implementing the up-to-the-minute management solutions without too much consideration. McIntire (1999:786-789) proposes that organisations are all "to quick to execute fashionable interventions". This impulsive action often means that specific organisational inefficiencies and problem areas are not dealt with properly (McIntire 1999, Harrison & Shirom 1999). Therefore, diagnosis if done properly gives the organisation a clearer overview and better position in which to learn more efficiently and effectively.

In relation to learning at organisation level this first tenet, diagnosis, is essential. If an organisation is not aware of its strengths, weaknesses and existing gaps, and how each of these affect the organisation as a whole, how will the organisation identify what it is that it needs to learn? This tenet also helps the learning process as it creates a context for the organisation that it can be measured against, a tangible benchmark.

Fundamental to the tenet of diagnosis are three key concepts, infrastructure, structure and knowledge and these are briefly examined below.

During diagnosis an organisation should review its infrastructure as it is these underlying systems which help to 'capture', 'share' and 'embed' knowledge within an organisations memory (Marsick & Watkins 1999). Interlinked with infrastructure is the actual organisational structure, which should be reviewed on the basis of communication and the ability to promote knowledge sharing. As Garratt (1999:202-206) points out, "the more autocratic and prone to blame…the less authentic information they [top management] are likely to get. The more open…the more likely one is to get a workable long term answer". This highlights the importance of reviewing organisational structure and systems to identify whether members of the organisation are able to easily pass

on information and knowledge, vital to learning at organisational level. The flatter the structure and the better the systems, the more easily knowledge and information is distributed aiding members responsible for making business decisions and implementing strategies.

Throughout diagnosis the organisation should also be identifying what knowledge is needed within the organisation and what gaps they have to fill (Fulmer & Sashkin 1995). According to Revans (1983), at this stage the organisation should be encouraging practitioners to clarify problems and discuss ways in which these might be resolved.

Diagnosis is an essential aspect relative to organisational learning. Before an organisation can determine what decisions to make and actions to take, best practice would be to firstly understand the organisation as an holistic entity. Understanding the organisations' strengths, weaknesses, gaps that need addressing and so forth allows those operating within it to use this information to support the learning process.

2.5.2 Tenet 2 – Challenge Underlying Assumptions

This tenet is concerned with an organisations' method or style of learning. It has been termed 'Challenge Underlying Assumptions' because of the need for organisations to examine their policies and values (Argyris 1993).

It comprises of two learning styles, the first being 'Single Loop' (Argyris & Schon 1978, 1996) also known as adaptive (Senge 1990, 1997) or reactive learning (Argyris & Schon 1978, Fulmer & Gibbs 1998). The second, that of 'Double Loop' (Argyris & Schon 1978, 1996), which is also known as generative learning (Senge 1990, 1997, Argyris & Schon 1978).

Each term is used to describe a learning style referred to in the literature as Single and Double Loop Learning due to Argyris and Schon being the first to introduce the idea back in the late 1970's. The key difference between these two styles is highlighted.

Single Loop, or reactive learning, is achieved when the organisation identifies a problem and takes action to remedy this (Argyris & Schon 1996, Ramsey & Sinha 2002, Pemberton & Stonehouse 2000). It may take a single action, or several actions, but the organisation continues to act until the problem is resolved (Ramsey & Sinha 2002).

When the term 'reactive' or 'adaptive' learning is used, it is often in the context of change (Senge 1997, Pemberton & Stonehouse 2000). This view is supported by Fulmer and Gibbs (1998) who refer to Single Loop Learning as 'Crisis' or 'Shock' learning. They suggest that organisations will not change or learn unless there has been a 'crisis' within the organisation stemming from a change within the external environment.

Quite simply, when an organisation experiences a change it reacts or adapts to this change where they see fit (Senge 1997, Pemberton & Stonehouse 2000). Their key emphasis is to adapt sufficiently to ensure survival within the marketplace. Argyris and Schon (1978, 1996) believe this style of learning centres around the organisation being able to operate efficiently, and as Korth (2000) supports, Single Loop, or reactive learning, means organisations make no change to their policies and objectives.

This is simple adaptation allowing the organisation to re-align itself with competition in the market place. This is known to some as the behaviourist approach to learning as it is "based on the view that learning takes place in response to changing stimuli in the competitive environment" (Pemberton & Stonehouse 2000:184-194). As a result there is some doubt as to the value of Single Loop Learning, with theorists such as Korth (2000) and Ramsey and Sinha (2002) believing that this can only achieve short term results. There is also debate that this method of learning does not enable the organisation to learn enough. However, Rieley (2001) advocates that Single Loop, reactive learning has to be better than the organisation not learning at all.

Double Loop Learning is unlike Single Loop, as learning at this level "results in a change in the values…as well as in its strategies and assumptions" of the organisation (Argyris & Schon 1996:21).

This occurs as organisations having identified a problem, rather than reacting immediately, assess the consequences of the problem before taking action (Ramsey & Sinha 2002). The organisation looks "beyond the immediate solution of problems by developing principles that may inform and determine future organisation behaviour, and lead to new ways of doing business" (Pemberton & Stonehouse 2000:184-194). They examine their underlying values, in particular their thinking and decision making processes (Fulmer & Gibbs 1998). This is known as the cognitive approach, which "implies that the learning process is complex, based on reasoning and draws on experience, experimentation, activity and analysis" (Pemberton & Stonehouse 2000:184-194).

Put simply by Korth (2000:87-98), organisations "disregard the constraints of the presented problem, examine the underlying assumptions and governing values, make fundamental changes, and find or create new problems to be solved". Korth continues on to say that this form of learning 'breaks old mindsets' so that long-term, 'transformational' results can be achieved.

This level of learning is also referred to as generative learning, as organisations become capable of creating new opportunities by building upon the existing competences they hold (Senge 1990, 1997). And as Korth (2000:87-98) said, organisations "find or create new problems to be solved" which shows that at this level of learning the organisation is aware that scenario planning and solving problems which do not actually exist is all part of the process. Rowden (2001:11-18) supports this view by suggesting that organisations "do not wait for problems to emerge or for crises to arise to compel re-evaluation".

It is believed Double Loop Learning allows the organisation to be more capable of changing with and in some cases ahead of, the dynamic environment. Organisations are able to make fundamental changes that ensure future forces

and stimuli for change, can be dealt with without major ramifications. By looking ahead they are also being proactive, examining and analysing what might be required for the future.

Processes that underlie this tenet of 'Challenge Underlying Assumptions' are predominantly concerned with Double Loop Learning. However, one aspect that is linked to Single Loop Learning is that of interaction with the external environment (Rowden 2001). Organisations that achieve Single Loop Learning are those that base the actions they take on the "…assumptions of technical rationality and competition" (Ramsey & Sinha 2002:59-68), focusing purely on efficiency of operations and survival in the market place.

Organisations likely to achieve Double Loop Learning are those that interact with their environment, but also take several further steps. Relative to a change in the environment, whether external or internal, an organisation should review the consequences of this change (Ramsey & Sinha 2002, Argyris & Schon 1978, 1996) before taking action. This not only allows a review on the effect of the problem on the organisation (Ramsey & Sinha 2002) it also examines how the problem may shape future strategic thinking (Ramsey & Sinha 2002) and decision-making (Argyris & Schon 1996). The emphasis is on learning from a current situation affecting the organisation and using this experience to help determine future decisions and actions made by the organisation.

Linked with the issue of strategic thinking and decision-making is the aspect of knowledge. Organisations wishing to learn at this level should encourage and support sharing and distribution of knowledge across an organisation so that members can question the thinking and decision-making process (Argyris & Schon 1978, 1996, Fulmer & Gibbs 1998). The aim here is to ensure that decision makers and strategy implementers are thoroughly aware of the overall organisations position before determining a course of action.

An organisation should also be consistently examining and reviewing its strategic plans. The use of scenario planning which looks at finding an

alternative plan for the future of the organisation (Fulmer & Sashkin 1995) is a tool regularly found amongst the O.L. and L.O. literature.

This tenet is termed 'Challenge Underlying Assumptions' because it is concerned with the method of learning taken by organisations. It is important for an organisation to react to stimuli within the environment and remedy associated problems. To be Single Loop Learners, whereby immediate action can be taken to remedy a problem, allows the organisation to continue operating without too much disturbance to its current routines and behaviours. However, it is also important for organisations to be able to address the consequences of their actions. By taking the Double Loop approach, an organisation is able to generate 'new knowledge' relative to how it, as an holistic unit, is affected by the actions it takes. This allows the organisation to address and change its values and strategies to ensure that it evolves alongside or ahead of changes within the business arena.

2.5.3 Tenet 3 – Continuous Analysis of Practices / Actions

This tenet features the most tools and processes that authors believe constitute learning. It is termed 'Continuous Analysis of Practices / Actions' as it concerns what the organisation does 'before', 'during' and 'after' a specific organisational action.

Continuous analysis is an important factor in relation to learning at organisational level due to constant change in the external environment (Poell et al 2000). Subsequently, organisations need to be constantly assessing their position and planning for the future. This continuity of analysis is also important to reduce the risk of organisations strategic plans becoming fixed, resulting in rigidity (Rowden 2001).

As this tenet contains many tools and processes that have been extracted from the literature it is logical to break it down into three key areas, 'before', 'during' and 'after' action.

Before Action

Before action refers to what the organisation does in the lead up to taking a specific action. This particular element includes several tools and strategies such as scenario planning, strategic planning, analysis, communication across the organisation, and the use of external advisory groups / consultants.

Throughout the literature there is particular emphasis upon continuous planning and scenario planning. Continuous planning is believed to be vital for organisational learning as the continual planning process means the organisation is more flexible rather than rigid resulting from fixed plans (Rowden 2001). By continuously revising plans the organisation becomes more open, allowing plans to be made by key members of the organisation, not just senior management. This in itself meaning that the plans are more likely to be embraced by the entire organisation. Fulmer and Gibbs (1998:6-21) believe that strategic plans are concerned with future 'problems or trends' and that these should be shared "across the organization, vertically, horizontally and diagonally". Kotnour (1999) adds that plans of this sort, based on past lessons, should be realistic and provide the organisation with a 'baseline' to help compare results of the action to be taken.

The importance of remaining flexible is also a reason that scenario planning is often put forward. This form of planning is concerned with recognising and detecting future trends and events and producing a plan on how the organisation should change relative to these trends (Fulmer & Gibbs 1998). A key reason for planning of this nature is due to the external environment in which the organisation operates. The instability of the business environment means that change is a constant feature for organisations. Many authors agree that it is vital for organisations to keep in touch with what is happening within this environment (deGeus 1997, Rowden 2001, Fulmer & Gibbs 1998). DeGeus (1997:51-60) for example found within his corporate longevity study, organisations that were survivors of change within the environment were those who "seemed to excel at keeping their feelers out, staying attuned to whatever was going on".

Also relevant, before taking action, is the need to review past experiences and the knowledge gained, allowing the organisation to be more flexible and adaptable (Pemberton & Stonehouse 2000). By reviewing its history, through assessing individuals' knowledge of events and examining documentation (Fulmer & Gibbs 1998), the organisation becomes more aware of what has happened in the past that could affect its future. This allows the organisation to better understand what action it should be taking. Rowden (2001:11-18) proposes that change is dealt with by the members of the organisation "not on preplanned schedule, but through personal judgements formed from experience and experimentation".

Reflection or clarification of actions taken previously is also key. Isaacs (1993) believes that reflection is a process of looking back and evaluating past events. This is a key step before taking future action as it enables individuals within the organisation to examine the connections between actions previously taken and the consequences upon the organisation (Easterby-Smith et al 1999).

Deciding on what action is best for the organisation also sees the use of consultants and advisory groups. Fulmer and Gibbs (1998:6-21) suggest that advisory groups "…may serve in a variety of roles, from helping the organization address specific, near term problems with minimal involvement of organizational members, to assisting management in formulating and implementing far reaching programs within the organisation that help shape the future for the organization".

However, to increase the significance of the processes discussed, overall involvement is key. Rowden (2001:11-18) believes all employees should be involved in the thinking and planning stages, "with few boundaries between departments, or between top and bottom. Everyone communicates and works together, creating enormous intelligence and flexibility to deal with rapidly changing environments". To do this, Marquardt (2000) suggests that leaders within the organisation should assist others to see the 'big picture' and the

associated 'trends, forces and potential surprises'. Marquardt believes this allows members of the organisation to "think systematically and be able to foresee how internal and external factors might benefit or destroy the organization" (2000:233-240).

During Action

During action refers to how the organisation responds when an action is implemented. Again, this aspect of the tenet encompasses various tools and processes. There are two particular concepts that stand out during the implementation stage, that of continuous experimentation and that of questioning the action and decisions taken.

Continuous experimentation refers to the ongoing process whereby everyone within the organisation works on a specific issue with the aim of bettering it (Fulmer & Gibbs 1998). Rowden (2001) suggests that the reason for continuous experimentation stems from the fact that implementation of action should no longer follow a plan step by step. Instead members of the organisation should be creative and autonomous in determining the best way for an organisation to act. Rowden (2001:11-18) goes on to say, "until an organization takes some action and mounts the first hill, the size and scope of the next peak cannot be foreseen…Business environments are too chaotic and organizational change too complex to establish firm objectives, fixed plans, and concrete programs of change".

Continuous experimentation is about examining the way in which the organisation implements an action or strategy and continually analyses the effect it is having on the organisation. In doing this the organisation can constantly re-align its actions to meet the changing circumstances of the external and internal environment. This is similar to looking at how the organisation is operating and benchmarking this against prior standards or the standard of competitors in order to ensure that best practice is adopted.

However, to be able to continuously experiment as a way of adopting best practice, the organisation and the senior management within it, need to be more tolerant about the way in which members of the organisation think and act (deGeus 1997). Rather than getting stuck with 'status quo' and having the mentality of 'this is the way we do things round here' the organisation encourages its members to expand and develop new ways of doing things. DeGeus (1997:51-60) believes that it is having a tolerance for new and different ways of thinking and acting that "provides an openness for learning and creates a willingness to look objectively at the total ecology of the organization". DeGeus (1997:51-60) continues by saying that of the survivors found in his study of 'corporate longevity' all possessed the ability to take on board "experiments and eccentricities that stretched their understanding".

The other key process is that of questioning the actions being taken and decisions being made. Fulmer and Gibbs (1998) propose that organisations that find an action is not producing the results expected require their members to discuss and question why this has resulted. In questioning and discussing the actions of the organisation, members are involved in the process of collective thinking (Bohm 1989) which enables them to produce new ideas and strategies to be adopted.

Communication is yet again key, with several authors highlighting the importance of dialogue (Fulmer & Gibbs 1998, Isaacs 1993, 1994). For example Isaacs (1993:24-40) advocates, "dialogue is a discipline of collective thinking and inquiry, a process for transforming the quality of conversation". He continues by saying dialogue assists people in sharing problems and analysing them.

Of course, during this stage there is also the need to address some of the processes previously mentioned, such as continuous planning, interaction with the external environment and so forth. Many of the tools and processes found amongst the literature are interlinked and are relevant to several tenets.

After Action

Lastly is the issue of what organisations do 'after' an action has been implemented. Again, this tenet has various underlying tools and processes. However, the key to this stage is communication and feedback that leads to the identification of future actions required by the organisation.

Communication is essential after an action has been implemented as it is concerned with relaying the information and knowledge gained from this action across the organisation. Poell et al (2000) and deGeus (1998) suggest, a key step after action is the dissemination of knowledge. This is considered a vital link to learning as knowledge in today's business world is considered an asset and a competence (Poell et al 2000, Pemberton & Stonehouse 2000). Unless the knowledge gained is communicated across the organisation, and applied the benefits of this knowledge are lessened (Argyris & Schon 1978, Huber 1991, Kotnour 1999).

Linked to communication is the need for the results and consequences of the action to be understood. DeGeus (1998) suggests, learning often occurs through discussion amongst members of the organisation who come from different functions and therefore have different perspectives. If each explains their perspective they all gain a better understanding of how this action has impacted upon the various functions of the organisation. This is also the view of those who support dialogue as a tool for learning (Isaacs 1993, 1994, Fulmer & Gibbs 1998).

It is clear from the communication argument that feedback is vital. This tends to be predominantly concerned with clarification. To clarify the results of the action, members within the organisation need to reflect back on the experience. As Rowden (2001) suggests, an organisation wishing to learn should, after implementation of an action, reflect back on the effect this had on the organisation before determining how best to adjust the organisations course. He also advocates that reflection should be a continuous activity embedded within the organisation.

Other Considerations

The three stages of this tenet, 'before', 'during' and 'after' action stem from the theory of Action Learning. According to Revans (1982) Action Learning comprises of giving teams two specific tasks, the first relates to solving a problem. The second relates to the need to learn from doing this, and to share what was learned with members of the organisation. Garratt (1999:202-206) proposes that "fundamental to this idea was the scientific process of careful observation, thoughtful reflection…careful experimentation, more rigorous reflection, leading to full blown action…". Juran (1988) and Kotnour (1999) believe the organisation experiences a 'lesson learned'. Members of the organisation discuss what they have learned from the experience of planning and implementing an action, as well as the results gained. Linked to reflection, those responsible for planning and implementing an action must look back at how they approached this and determine why they achieved the results they did (Kotnour 1999). Linked to communication, Kotnour (1999) suggests that 'lessons learned' should be documented and disseminated within the organisation for all to see.

It is the processes of communication and feedback that assists members within the organisation to decide upon future actions. Having identified these processes and accepted that change is imminent, all organisations should be able to prepare for change. Rowden (2001) suggests that the organisation should not target specific change but be aware of and prepared for any change.

This tenet of 'Continuous Analysis of Practice / Actions' is associated with adopting best practice. If the organisation is able to sufficiently plan, experiment with and review the actions it takes, it is more likely to be able to address pressing issues within the business arena and learn from doing so. If the organisation makes a continuous effort to examine the planning, experimentation and review stages they are far more likely to learn and benefit from this by being consistently aware of how the organisation deals with and evolves with change.

2.5.4 Tenet 4 – Emphasise Learning Values

This tenet examines the organisation as an holistic unit. It is concerned with structure, infrastructure, culture and leadership of the organisation, all of which are capable of either assisting or hindering the learning process (Pemberton & Stonehouse 2000). It is because of this ability that the organisation's 'make up' is linked closely to learning. It is also important to add here, that many of the tools and processes found throughout the literatures rely on these four areas being focused towards learning because of the effect each can have.

An organisation's structure is believed to influence behaviour (Fritz 1989). To encourage and enable learning, organisations need to create a flatter structure (Smith 1999, Pemberton & Stonehouse 2000, Poell et al 2000) and become less bureaucratic (Pemberton & Stonehouse 2000). As the literature suggests, the more structurally traditional and hierarchical the organisation, the more hindered the development of learning, as the pyramid-like structures obstruct "the building, diffusion, co-ordination, and control of knowledge" (Pemberton & Stonehouse 2000:184-194).

It is believed that by creating a less hierarchical and supportive structure members of the organisation are more inclined to share their ideas and knowledge. The more hierarchical and bureaucratic, the harder it is for members of the organisation to pass knowledge up through management layers.

Senge (1997) concludes, the traditional command and control hierarchy will hinder the future of organisations due to rapid and constant change. He adds that senior management will need the knowledge and experience of members in the lower echelons of the organisation to assist them in finding solutions to problems. Poell et al (2000:25-49) propose that "the work organization is no longer characterized by a strong Taylorist task division. People's jobs are now less individualistic and more semi-autonomous team based". This again re-emphasises the need for organisations to flatten their structure in a bid to

encourage knowledge generation and dissemination across the organisation in an effort to support learning.

The infrastructure of the organisation is also key, as it is these systems that allow for better communication across the organisation (Pemberton & Stonehouse 2000). Systems are responsible for sharing and embedding knowledge throughout the organisation (Marsick & Watkins 1999). It is believed that for an organisation to learn, there must be 'frequent' communication amongst the individuals whom make up the organisation (Smith 1999). Communication, or dialogue as it is also known, is something to be encouraged within the organisation as it is "…inquiry into the process, assumptions and certainties that compose everyday experience" (Isaacs 1993:24-40). If there are sufficient systems, that enable communication across its breadth and depth, members of an organisation should be able to gain enough information and knowledge to make well informed appropriate business decisions (Wijnhoven 1995, Roth & Niemi 1996). Isaacs (1993:24-40) advocates, "conversation is the means by which people share and develop what they know".

Culture is another key factor linked to learning. If individuals within the organisation are going to learn they must feel that they are supported by the organisation (Marsick & Watkins 1999). For example deGeus (1997) found in his study of 'corporate longevity' that cohesion and identity of members in the organisation is vital, enabling individuals to feel that they are part of the entire organisational unit rather than serving a specific function of it.

Organisational culture consists of "…the values, attitudes and beliefs that steer the actions and behaviour of the individuals making up the organisations" (Pemberton & Stonehouse 2000:184-194). Therefore, as culture steers 'actions' and 'behaviours' the organisation should take a supportive stance, promoting learning by encouraging individuals within the organisation to develop through experimentation (Pemberton & Stonehouse 2000, Rowden 2001). This developmental, trial and error atmosphere allows members of the organisation to create new ideas, hence 'new knowledge'. However, to support this

experimentation process individuals need a trusting atmosphere (Pemberton & Stonehouse 2000, Ramsey & Sinha 2002) where their actions are supported, not controlled, and not full of negative ramification. As Ramsey and Sinha (2002:61) suggest, the organisation requires a "culture that values learning more than knowing the right answer". It is said that learning is not possible if the culture "instils fear of making mistakes because of the blame and punishment that will ensue" (Marsick & Watkins 1999:207-211).

This brings us onto the issue of leadership. Senge (1997:30-32) suggests that "…in the knowledge era we will finally have to surrender the myth of leaders as isolated heroes commanding their organisations from on high". Isaacs (1993:24-40) surmises, "…thinking alone at whatever level of leadership is no longer adequate. The problems are too complex, the interdependencies too intricate and the consequences of isolation and fragmentation too devastating". Collective thinking is the key concept that needs to be embraced by leaders of organisations.

Instead, leadership will be more about encouraging staff (deGeus 1997) mentoring (Marsick & Watkins 1999, Poell et al 2000) and sharing of responsibility (Senge 1997). Revans (1983) believes that leaders within organisations must develop and ask questions of the employees that will help promote the sharing of knowledge and the development of individuals. DeGeus (1997:51-60) suggests leaders must "heed the opinions and practices of other people. The organization must give people the space to develop ideas. They must have some freedom from control, from direction, and from punishment of failures. In other words, managers must put the principle of tolerance into practice by taking risks with people and looking in new places in search of fresh ideas".

The key aspect here is the idea of valuing and supporting members of the organisation, and deGeus (1997) advocates that the organisation should appreciate people rather than tangible assets. DeGeus continues to say that the histories of the organisations he studied showed that those who switch and

trade tangible assets to work around the members of the organisation are more likely to survive within today's environment.

The purpose of leadership and management in an organisation that wishes to learn is more about assisting these members in tackling problems and issues and helping them to create new knowledge (Nonaka & Takeuchi 1995). Marquardt (2000:233-240) suggests, to do this leaders should possess several traits, including those of 'systems thinker', 'change agent', 'innovator and risk taker', 'servant and steward' and 'mentor, coach and learner'. Furthermore, it is "…increasingly clear to almost every organisation that our new century demands new kinds of leaders with new skills. Leadership styles and skills that may have worked in a more stable, predictable environment of the 20th century will be inadequate in this new era of uncertainty and rapid change" (Marquardt 2000:233-240).

For an organisation to learn, as an holistic unit, it must promote learning by supporting its individuals. To do this effectively the organisation needs to examine its structure, infrastructure, culture and leadership, all of which can affect the learning process. By addressing each of these areas and ensuring they are aligned to the needs of the individuals within the organisation, they are in the position to benefit from the overall learning experience(s).

2.5.5 Tenet 5 – Challenge the Learning Process

This tenet is unlike the others as it takes one step further into the true meaning of organisational learning. Throughout the majority of the literature organisations are said to learn through adaptation (Single Loop) or through being generative and proactive (Double Loop). However, there is also a small amount of literature that introduces the idea of Triple Loop Learning.

According to Isaacs (1993, 1994) Triple Loop Learning is concerned with an organisation examining the way in which it learns and then finding how best to learn for its future. It is "the learning that opens inquiry into underlying whys. It is the learning that permits insight into the nature of the paradigm itself"

(Isaacs 1993:24-40). Pemberton and Stonehouse (2000:184-194) believe a learning organisation is characterised by Triple Loop Learning when "…learning about learning, creates an organisational context that both nurtures new knowledge and exploits its existing knowledge assets". DeGeus (1997:51-60) suggests, "…success now depends on mobilizing as much of the intelligence at a company's disposal as possible".

In basic terminology, Triple Loop Learning is achieved when an organisation is consciously aware of the way it learns and examines its learning processes. The aim is to achieve a better way, closing any gaps found, in order to become better, more informed learners at organisation level. Garratt (1999) believes, Triple Loop Learning is a 'metacompetence' to be valued by the organisation.

Garratt (2001:3) advocates that Triple Loop Learning is a "conscious and interactive" process. He believes that for organisations to achieve Triple Loop Learning the organisation needs to be continuously aware of the interconnectedness between external and internal environments. Integrated with this is the need for the organisation to assess organisational efficiency and effectiveness and set strategies to promote learning. Isaacs (1993:24-40) suggests that organisations that achieve Triple Loop Learning would pose questions to themselves such as "What is leading me and others to have a predisposition to learn in this way at all? Why these goals?" He expands by saying that Triple Loop Learning is about the "exploration of fundamental habits of attention and assumption behind traditional problems of thinking" (Isaacs 1993:24-40).

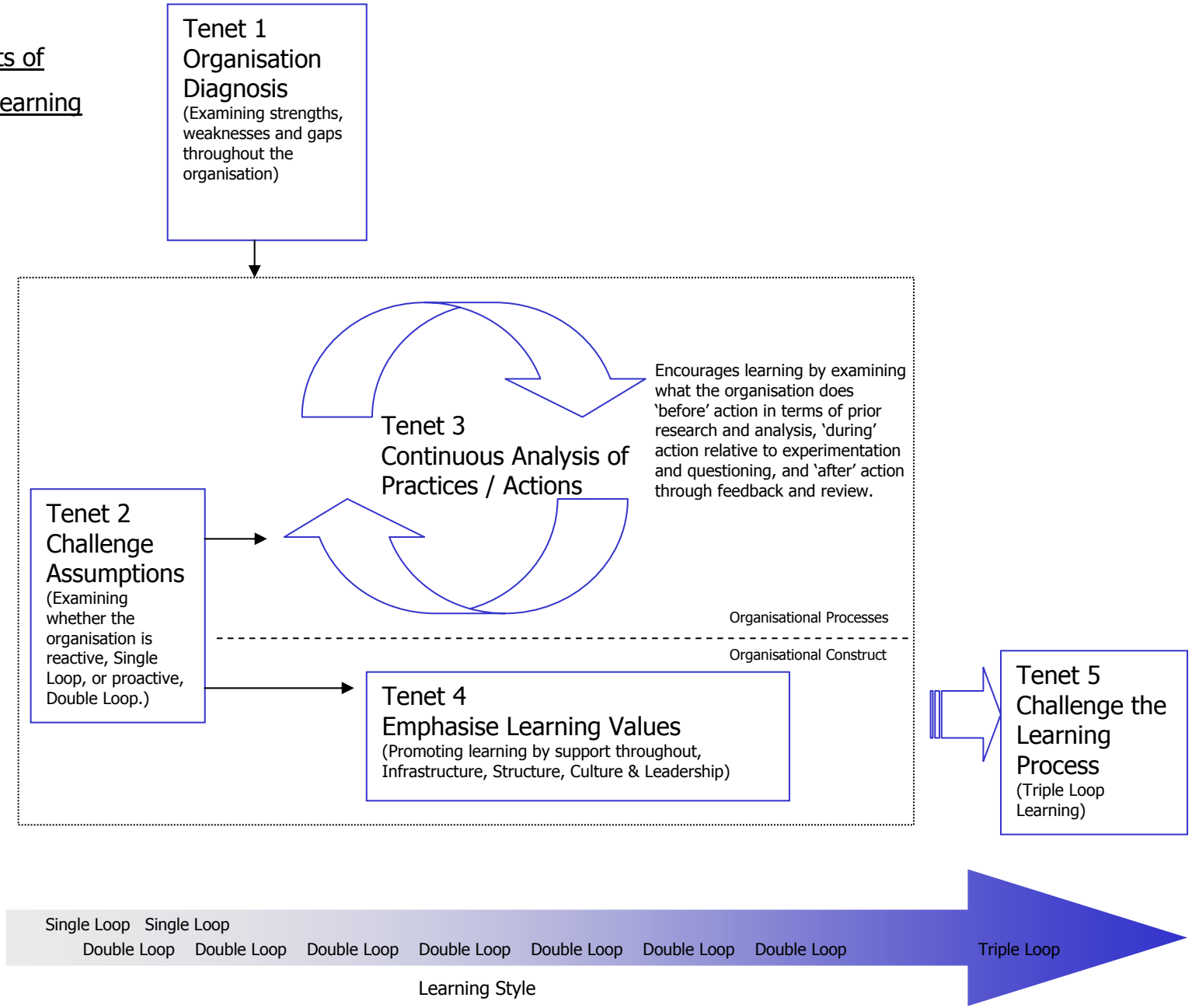
DeGeus (1997:51-60) sums up organisations that are able to truly learn by suggesting that these organisations "…know who they are" and "understand how they fit into the world". He also suggests that learning traits "manifest themselves in behaviours designed to renew the company over many generations".

Triple Loop Learning is considered the ultimate level of learning as it goes beyond Single and Double Loop Learning by actually examining the way the holistic organisation learns. Furthermore, it determines how they should be learning for the future. This approach is extremely cognitive involving organisations habits, thinking and behaviours, all of which are changed to suit the conditions of the organisations internal and external environments. This level of learning is a very conscious process and something that does not occur without organisations awareness, perhaps unlike Single Loop Learning in which organisations simply react to stimuli with remedial action, much like habit.

2.6 Towards a Model of Organisational Learning

To further illustrate how each of these tenets constitutes organisational learning a model is introduced. Figure 2.4 illustrates how each tenet is linked to organisational learning and how each tenet contributes to learning style, in effect the extent of learning, whether this be Single, Double or Triple Loop Learning.

Figure 2.4 Tenets of Organisational Learning



The model outlined above illustrates how the identified tenets of learning in affect contribute to the learning style of the organisation. This is evident by the arrow which expands across the bottom of the model, beginning with Single Loop Learning and progressing into Double and Triple Loop Learning. What is important to note at the outset is that these tenets are not truly sequential. It cannot be proven, and the literature does not identify, whether specific tenets must first be implemented before others can be achieved. So despite these tenets being numbered, this is not to suggest any sequence of order. However, the assumption is made that the tenet, 'Organisation Diagnosis', is a logical first step. Understanding where the organisation stands relative to where it ought to be means that gaps can be identified and the organisation can begin to address these which ultimately starts the learning process.

Tenet 1, 'Organisation Diagnosis', feeds into the top of the model because having identified gaps within knowledge, strengths and weaknesses, the organisation can apply this understanding of the 'current state' at any time, therefore this has the potential to affect all other tenets.

Tenet 2, 'Challenge Underlying Assumptions' is seen feeding into both tenets 3 and 4, 'Continuous Analysis of Practices / Actions' and 'Emphasise Learning Values'. The rationale for this being that despite whether the organisation is reactive, proactive or both, it can effect how the organisation addresses its processes. Furthermore, it can address the actual organisational values on learning, hence influence organisational construct.

Tenets 3 and 4 are divided in the model by a dotted line. The rationale behind this is that Tenet 3 is concerned with organisational processes whereas Tenet 4 is concerned with the actual construct of the organisation, referring to the Infrastructure, Structure, Culture and Leadership of the organisation.

Tenets 2, 3 and 4, 'Challenge Underlying Assumptions', 'Continuous Analysis of Organisational Practices / Actions' and 'Emphasise Learning Values' are

contained within a box in the model. This represents a proposition that all three of these tenets are understood and utilised before Tenet 5, 'Challenge the Learning Process', can be achieved by an organisation. Basically, an organisation must examine how it reacts to the external environment. It must then examine how it can be proactive towards continuous change, continuously analyse its practices and support the learning process before it can progress onto challenging the actual 'learning process'. This proposition is partly assumption and partly based on literature that suggests Triple Loop Learning is the ultimate learning style. Any organisation displaying evidence of Triple Loop Learning would be classed true 'learning organisations'.

To summarise, the model illustrates how the identified tenets of learning come together to constitute organisational learning. The model acknowledges that the extent to which organisations can learn varies, and therefore allows a degree of learning to be achieved even if all tenets are not practiced. This takes the form of Single, Double or Triple Loop Learning as proposed throughout O.L. and L.O. literature.

2.7 Summary and Conclusion

The literature review has addressed two factors. Firstly, it has looked at what organisational learning is and arrived at a working definition. Secondly, the literature has provided a list of tools and strategies that have been synthesised and amalgamated into a series of tenets that represent organisational learning.

In producing a synopsis of the tenets required for learning, this chapter has brought together the varying perspectives and knowledge of authors from multiple disciplines. Furthermore, it has addressed the fragmented nature of organisational learning literature. This has satisfied the first of three secondary research questions that asks: What are the tenets of organisational learning?

The next step in this thesis is to develop and utilise a test to search for evidence of learning amongst a sample of organisations. This includes answering the remaining two secondary research questions:

- What are the key tenets espoused by New Zealand organisations?
- Are New Zealand organisations characterised by Single, Double or Triple Loop Learning?

The process of developing a test, that will search for evidence of learning to help address these questions, is covered within the next chapter, Methodology.

3.0 - METHODOLOGY

This thesis seeks to explore and expand on the knowledge surrounding organisational learning by firstly synthesising the literature concerned with tools, strategies, prescriptions and processes of learning. It further expands on this knowledge by testing for evidence of learning in order to address the gap concerned with the actual 'practice' of learning.

This chapter begins by exploring the need for a 'relevant' research sample for the purpose of testing for organisational learning. It then moves onto the selection of data required for analysis and justifies its use. The chapter then defines and justifies the use of Content Analysis. In doing this it also examines the advantages and disadvantages of this method, and briefly explains how some key criticisms of Content Analysis have been managed.

The chapter then turns its attention to the application of Content Analysis. In particular, it identifies the research questions that frame this thesis before discussing how this method was applied, step-by-step.

In summary, this chapter addresses two questions, 'Why' and 'How' was Content Analysis used.

3.1 Choosing a Research Sample

On occasion, organisations claim to be learners, as evidenced in 2001 and early 2002 after a conference called 'Catching the Knowledge Wave'[1] was held in Auckland. But where is the evidence? Reality appears to be that despite all the hype, little evidence of organisational learning is found.

[1]Catching the Knowledge Wave, held at Auckland University August 1-3, 2001. Aim of the conference, "…to build an economy which is less dependent…on commodity prices…and a low dollar and driven by innovation…" (Rt. Hon. Helen Clark 2001).

A search of websites, journals and other links to the 'Knowledge Wave' conference does little more than bring up information on the need for retaining knowledge within New Zealand. It also highlights elements of the conference, specifically the speech given by Michael Porter. What this does not do is provide any valuable information regarding 'learning organisations'.

There is clearly a need to uncover whether O.L. features within organisations or whether it is simply a notion. Therefore, a research methodology with the ability to test for the core tenets of learning (Chapter 2) is needed. This process of testing will ultimately result in the ability of the researcher to support or reject the challenge outlined by Argyris and Schon (1996) concerning the issue of whether organisational learning is 'practiced'.

As New Zealand has supposedly picked up on the importance of the generation and dissemination of knowledge, it was decided to target New Zealand organisations, especially because of link between knowledge and organisational learning.

To help select a sample the New Zealand Stock Exchange (NZSE) was used as a reference point for finding the names of organisations as this pinpoints 'leaders' by market capitalisation[2]. Market leaders were targeted as it was felt that they might reflect on current environmental pressures. Thus, increasing the chance of picking a research sample that is aware of New Zealand's push on the 'Knowledge Economy'.

This use of the New Zealand Stock Exchange identified forty organisations, known as the NZSE40. For the purpose of this thesis a suitable sample size required ten organisations. This was considered a large enough sample, respective of the theory building and exploratory approach of this thesis. Two simple decision rules were applied to the NZSE40 to help select the organisations needed. These rules were designed as part of a 'proportional

[2] Market Capitalisation refers to the amount of capital that the organisation generates from the public sale of shares. The definition given by the New Zealand Stock Exchange (NZSE) is "the aggregate value of all of a company's…equity" (www.nzse.co.nz/exchange/about/indiices.html).

stratification' technique (Page & Meyer 2000) used to ensure influences such as the 'Knowledge Economy' were taken into consideration to help select a 'desirable sample'. The decision rules were as follows:

1. Organisations must be New Zealand run to ensure the sample is affected by the same environmental, governmental and business influences.
2. Annual reports for these organisations must include statements made by the Chairperson and the CEO / Managing Director as these statements are signed off, therefore considered 'true'.

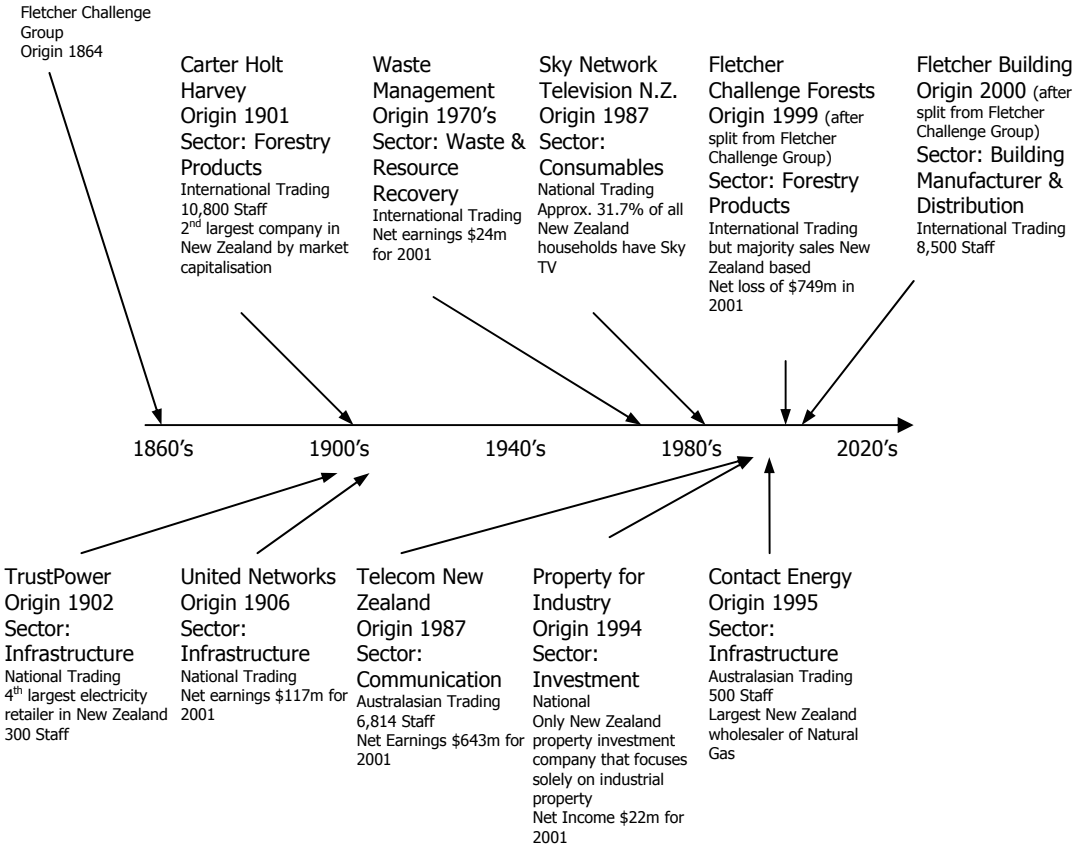
These decision rules ensured that the sample of organisations was consistent, all operating within the same business environment, with similar business pressures. It also ensured that the reports contained Chairperson and CEO statements as these were considered the most appropriate information for analysis. Further rationale for using Chairperson and CEO statements is given later in this chapter.

In applying these rules approximately one quarter of the NZSE40 was removed. To reduce any further selection bias, ten organisations were chosen at random, determining a sample selected "…by a chance process that gives each member of the sampling frame an equal chance (probability) of being represented" (Page & Meyer 2000:102). The organisations chosen were:

1. Carter Holt Harvey
2. Contact Energy
3. Fletcher Building
4. Fletcher Challenge Forests
5. Property for Industry
6. SKY Network Television
7. Telecom New Zealand
8. TrustPower
9. United Networks
10. Waste Management

The continuum in figure 3.1 helps describe these organisations by industrial sector, year they were formed and additional information such as staff numbers.

Figure 3.1 A Continuum of Organisations and Key Facts



It is evident from figure 3.1 above that these organisations are of various ages, the oldest being Carter Holt Harvey and the newest Fletcher Challenge Forests and Fletcher Building, having recently split from their parent company. The information for each organisation also illustrates that of the ten organisations, four trade nationally, two trade within Australasia and the remaining four are international. Despite differences such as overall size, market trading and industrial sectors all of these organisations are New Zealand run, affected by the same governing rules and economic climate.

In selecting organisations listed publicly on the Stock Exchange it also meant that sources of documentation were readily available, specifically annual reports that can be attained from the organisation or the World Wide Web. In using

information from annual reports this research also becomes easily replicable, as researchers can use the same approach with organisations listed on any Stock Exchange.

Having identified the research sample, the next step is to select a research methodology best suited to the aims of this thesis. The key criteria for the methodology required is the ability to take on aspects of theory, in this case the tenets of organisational learning. In testing for evidence of these, the results can help determine if organisational learning is practiced.

3.2 Selecting a Research Methodology and Data Source

The method best suited to the research criteria is Content Analysis as this method allows for the identification of specific phenomena amongst data sources. The rationale behind testing for evidence of learning lies with the need to expand current theory that supports and promotes the use of O.L. yet lacks authentication. Therefore, using Content Analysis to test for evidence of the tenets compiled in Chapter 2, makes this method all the more significant in regard to addressing the gap concerned with 'practice'.

For the purpose of this thesis, the ease of access of company wide information within annual reports that contain relevant information helped determine the data source. The use of 'secondary data' is seen as an advantage as "secondary sources provide evidence of what was done at the time" (Harris 2001:191-208), rather than a recollection of intent. As Hakim (1982:16) suggests, the use of secondary data "forces the researcher to think more closely about the theoretical aims and substantive issues of the study".

Another key factor in choosing Content Analysis is that the results it produces during data collection can be easily applied to a theoretical framework, in this case O.L., to give the findings greater, more significant meaning.

Further rationale for this methodology came from Weber (1990:9) who lists several functions of Content Analysis adapted from the work of Berelson (1952). Three of these are of particular interest:

1. Content analysis can "identify the intentions of the communicator"
2. Content analysis can "reveal the focus of the individual, group, institutional or societal attention"
3. Content analysis can "describe trends in communication content".

With the use of annual reports, the 'intentions of the communicator' is an important aspect. Statements from key personnel such as the Chairperson of the Board and the Chief Executive Officer are reflective of past events as well as statements of future intent. Either way, if learning is on the agenda you would expect this to feature within statements made by key personnel.

Linked closely to the intentions of the communicator is the issue of 'societal attention'. As previously noted, there has recently been real interest by media and the government of New Zealand over the issue of a 'Knowledge Economy'. In fact, it is reported that New Zealand has "undergone radical restructuring of the public sector and economic reform over the last fifteen years" because of influences such as this (Davenport & Bibby 1999:431-462). This ongoing interest in the 'Knowledge Economy' was reflected through interest shown in the Knowledge Wave conference of 2001, and is a key factor considered in choosing the sample of organisations to be analysed for this thesis. Consequently, Content Analysis that can reveal 'societal and institutional attention' as well as 'describe trends' becomes more significant relative to examining whether organisations practice organisational learning, as learning is linked so closely to knowledge. It is assumed that focus on the 'Knowledge Economy' could well be reflected within the sample of organisations <u>if</u> learning at organisational level is considered important.

This section has illustrated that Content Analysis is best suited to the research criteria of this thesis. It has the ability to test for phenomena amongst data and focus on aspects such as 'institutional and societal attention' and 'trends'. In

determining that this method will be used the next step is to explore this methodology.

3.3 Exploring Content Analysis

This section looks to define Content Analysis and its approach to data analysis. The reliability, advantages and disadvantages of the methodology are also discussed.

Content Analysis has numerous definitions throughout the literature, which has resulted in scepticism (Hansen et al 1998, Berger 2000), specifically from researchers that take a phenomenological, qualitative approach to data analysis. However, over time this method has become more widely accepted (Berger 2000).

Krippendorff (1980) suggests that Content Analysis allows the researcher to deduct specific conclusions from 'content' or 'data', implying that Content Analysis emphasises the true meaning of the data relevant to its milieu. Weber (1990:9) adds that "content analysis…uses a set of procedures to make valid inferences from text". Wright (1986:125) expands by saying that Content Analysis allows for the "systematic classification and descriptions of communication content according to certain usually predetermined categories".

Weber (1990:24) also supports that Content Analysis "…permits the intensive and detailed analysis of a single theoretical construct". In this instance the construct is organisational learning, categorised relative to the five tenets identified and discussed in Chapter 2. Hansen et al (1998) proposes that Content Analysis that produces quantifiable data cannot interpret the social significance of this data without its application to a theoretical framework. In this case O.L. and L.O. are widely accepted by scholars and practitioners, hence the base for interpreting results is relatively sound.

3.3.1 Quantitative or Qualitative?

It is the view of authors such as Berg (1998), Insch et al (1997) and Sarantakos (1993) that Content Analysis can be both quantitative and qualitative. This is evident within the following quote:

> Content Analysis has "elements of both the qualitative and quantitative approaches in that the counts of textual elements that emerge from the first stage of the analysis "merely provide a means of organizing, indexing and retrieving data…This offers, in turn, an opportunity for the investigator to learn about how subjects or the authors of textual materials view their social worlds" (Berg 1998:225).

Content Analysis is predominantly considered quantitative (Berelson 1952, Berger 2000 and Sommer & Sommer 2002) as it identifies and "counts the occurrence of specified characteristics or dimensions of texts" (Hansen 1998:95). Put more simply by Holsti (1969) it is quantitative because it deals with 'frequency'.

Despite the quantitative tendency, authors such as Hansen et al (1998) and Wright (1986) warn of the dangers of analysing text from a positivist perspective. Hansen et al (1998:96) advocate that understanding the quantitative aspects of the data is only possible by "placing what is counted in content analysis within a theoretical framework which articulates…the social significance and meaning of what is being counted". The idea that data be applied to a theoretical framework has resulted in other theorists depicting Content Analysis as both quantitative and qualitative (Wright 1986). Singling out the frequency of tenets amongst the data would be meaningless to this research unless then applied to the theory of learning in which the five tenets were extracted. Therefore, this thesis takes both a quantitative and qualitative stance towards data analysis.

3.3.2 Reliability and Significance

Content Analysis, according to Krippendorff (1980) comprises two types of reliability, known as 'stability' and 'reproducibility'. Stability refers to the extent to which results remain the same over time (Krippendorff 1980). Therefore,

coding text repeatedly and attaining the same results proves stability. If results vary there is a degree of inconsistency, therefore a degree of unreliability.

Reproducibility, also referred to as 'Inter Rater Reliability', (Hansen et al 1998) is different from stability in that it measures the number of times the Inter Raters (also known as coders) agree divided by the number of actual observations made (Page & Meyer 2000, Krippendorff 1980, Hansen et al 1998, Berger 2000). The result of this calculation is known as the 'percentage of agreement'. If classification of the text by various coders produces the same results then it is said to have high reproducibility. The higher the agreement the greater the reliability of the results. The basis for the percentage of agreement fluctuates throughout texts, with Berger (2000) advocating 90% or higher and Hinkin and Schriesheim (1989) advocating that 60% is all that is required, whereas Page and Meyer (2000) suggest 80% is acceptable. It would appear that this percentage is set in accordance to actual study requirements.

Reliability is integral to the coding of text and the credibility of results and has to be considered during research design. For the purpose of this thesis, the percentage of agreement has been set at 80% in accordance with Page and Meyer (2000).

3.3.3 Perceived Advantages and Disadvantages of Content Analysis

Literature on Content Analysis reports of numerous advantages and disadvantages from using this methodology (Weber 1990, Hansen et al 1998, Berger 2000). Both perspectives are now discussed.

One specific advantage stems from Content Analysis being used increasingly to examine how change reflects upon 'social and cultural issues, values and phenomena' (Hansen et al 1998). This link to economic, political and social relationships illustrates the advantage of using this technique in light of the emphasis in New Zealand upon the 'Knowledge Economy'. Especially as this focus on knowledge could potentially affect material reported within annual reports.

Content Analysis is also advantageous in regards to its direct link to 'actual practice'. As Berger (2000:173) suggests, "content analysis deals with actual behaviour", it identifies what has actually been done through analysis of the chosen 'data'. So, in analysing annual reports from 2001, a timeframe that encompasses New Zealand's push on the importance of knowledge, the sample of organisations *should* reflect on the significance of knowledge creation and dissemination, hence learning.

Another advantage is that Content Analysis is said to describe and examine data more comprehensively "a way less prone to subjective selectiveness and idiosyncrasies" (Hansen et al 1998:91). According to Sommer and Sommer (2002) using secondary data for analysis means that "the observer has no effect upon the material collected" (Sommer & Sommer 2002:178). Subsequently, the material analysed will be less prone to bias than other research methods. As Harris (2001:191-208) supports, sources of secondary data, such as annual reports and public documentation, provide "evidence of what was done at the time, whereas evidence gathered by questionnaire or interview after the event would have provided only a recollection of intention". This is an important aspect linked to this thesis as the research aims to identify whether organisations within New Zealand adopt organisational learning.

Also of advantage is that Content Analysis reduces researcher and respondent bias that occurs more easily with other survey techniques such as interview, achieved with the use of clearly structured steps. Reducing bias is paramount to the credibility of a study. With the use of Content Analysis this method reduces bias and therefore increases reliability, which results in more credible data being collected. For example, if evidence of tenets is found this will be considered more credible than if an organisation member reported there to be organisational learning after being prompted by questions during an interview. Despite the significance of learning being emphasised through the link to the 'Knowledge Economy', to decrease subjective selectiveness, no specific information on particular organisations was sought, as to reduce researcher

bias. Pinpointing specific organisations because of their connections to the Knowledge Wave conference or their claim to be learning organisations would skew the data. Therefore by taking the NZSE40 as a base sample and randomly selecting ten organisations researcher bias and subjectivity is inhibited.

Disadvantages of Content Analysis are predominantly concerned with the 'process' of this method. Table 3.1 outlines the key criticisms of Content Analysis. It also illustrates how each criticism has been taken into consideration and resolved relative to the purpose of this research.

Criticism:	**Resolution:**
Produces quantitative, descriptive results that do not explain the true meaning of the content (Hansen et al 1998, Sommer & Sommer 2002).	This can be resolved by applying results to the theoretical framework (Hansen et al 1998) of what is being studied – organisational learning.
Random sampling can lead to a poor representative sample (Berger 2000).	Rather than complete random sampling, the study has used stringent sampling criteria and decision rules to select the initial 40 organisations and reduce the sample to 10.
Coding reliability is often questioned (Berger 2000, Hansen et al 1998).	The use of independent coders, also known as Inter Coders (Hansen et al 1998), will be used to code identical data analysed by the researcher. The higher the percentage of agreement, the less likely the criticism relative to reliability (Berger 2000). As well as this, the percentage of agreement between coders and the researcher will also be examined.
Categorisation of data can be either too broad or too narrow and thus be rejected (Berger 2000).	To overcome the problem of categorisation and breadth issues, a detailed coding system will be used. Categories on the coding sheet will be focused to ensure specificity.
Operational definitions required for coding can be general and abstract therefore open to varied interpretation, which weakens reliability (Berger 2000).	Using the five tenets, definitions of these will be made distinct and devoid of subjectivity.

Table 3.1 Key Criticisms of Content Analysis

Despite there being several criticisms of Content Analysis there are still many good reasons why this technique should be used. This method has advantages that far outweigh its disadvantages relative to testing for evidence of organisational learning.

To conclude, Content Analysis is chosen for its factual nature, the focus it brings to the study (Berger 2000) and its ability to deal with pending issues and events in today's environment (Berger 2000). Despite there being debate between quantitative and qualitative supporters, it is evident from the literature that all research methods have their flaws. Therefore, it is best to choose a method that suits the researchers needs and in this case Content Analysis proves to be the most valuable.

The following section examines Content Analysis further by looking at its application to this particular study.

3.4 Applying Content Analysis: Data Collection

> "There is no simple right way to do content analysis. Instead investigators must judge what methods are most appropriate for their substantive problems" (Weber 1990:13).

This quote illustrates that Content Analysis can vary in its application. For some, this freedom of research design may generate criticism. For others, it means that Content Analysis has many advantages when used to examine trends within data.

This method follows predetermined, structured steps of which there are several variations. The following steps have been adapted from literatures by Hansen et al (1998), Berger (2000), Krippendorff (1980) and Weber (1990) and form the research design for this thesis.

Step 1: Identify and define research questions.

Step 2: Identify the sample of text to be examined. Justify why this is to be used.

Step 3: Produce an 'Operational Definition' of the topic to be studied and determine categories to be analysed.

Step 4: Specify the unit of analysis and explain it.

Step 5: Generate a coding system.

Step 6: Complete a pilot study including use of Inter Coders to test for Inter Rater Reliability. Revise coding system.

Step 7: Use revised coding system to collect data. Analyse sample.

Step 8: Present findings

Steps 7 & 8 are the basis for Chapter 4, Findings and Discussion and therefore are not discussed in detail within this chapter. Steps 1 through 6 however are detailed below.

Step 1: Identify and define research questions.

This thesis is framed by a broad question: Are organisations practicing organisational learning?

This question is too broad to answer with accuracy, but it gives rise to 3 further, more explicit questions that ensure focus and scope for this research. These three secondary questions target specific information from literature and data analysis that when pieced together provide the researcher with adequate information in which to draw legitimate conclusions.

Each of these questions is illustrated in the following table with a brief description of their link to the primary research question. It also illustrates where the information required to answer these questions is to be sourced.

Secondary Research Questions:	Link to Primary Research Question:	Source required:
- What are the tenets of O.L.?	- To find whether an organisation is practicing O.L. there is a need to firstly identify the tenets of O.L.	- Organisational Learning and Learning Organisation literature.
- What are the key tenets espoused by New Zealand organisations?	- To examine which of the five tenets are prevalent to assist with exploring O.L. theory.	- Data from sample organisations
- Are New Zealand organisations characterised by Single, Double or Triple Loop Learning?	- Each classification is representative of the 'extent' of learning and will help determine the significance of the evidence found.	- Data from sample organisations applied to the theoretical framework of organisational learning.

Table 3.2 Secondary Questions and their Source of Information

Table 3.2 illustrates that in an attempt to answer the broader question, there is firstly a need to determine what constitutes organisational learning. In this case tenets of learning have been targeted (Chapter 2), and five tenets were assembled:

1. Organisation Diagnosis
2. Challenging Underlying Assumptions
3. Continuous Analysis of Practices / Actions
4. Emphasise Learning Values
5. Challenge the Learning Process

In addressing this question the information attained acts as a pre-step to data collection.

The next step is to take the details of these tenets and try to find if any are espoused[3] by organisations within the research sample. The significance of looking at which tenets are most prevalent is concerned with applying the results to the theoretical framework of organisational learning. This can help to establish a clearer idea of whether New Zealand organisations deem O.L. important.

To further question the issue of whether organisations practice O.L. an additional question concerning Single, Double or Triple Loop Learning is posed. This will help to clarify any evidence found by addressing the extent, or level, of learning this evidence represents. Specifically because each of these learning styles represents, in theory, the degree to which organisations learn. For example, some theorists discuss how Single Loop Learning is not enough in today's business arena and that to enhance sustainability organisations should be characterised by Double Loop or higher. In focusing on extent, the issue of whether organisational learning is practiced can be addressed more factually.

Having created secondary questions that address the scope of this thesis and determined the research sample, the initial question posed is remodelled. In doing this the primary research question that drives this thesis becomes: Do New Zealand organisations espouse the tenets of organisational learning?

In answering this explicit question, despite its outcome (evidence or no evidence) this thesis builds on the theory of organisational learning.

Step 2. Identify the sample of text to be examined and justify

Data for analysis is sourced from annual reports. These reports are chosen as any publicly trading company has to produce, by law, detailed reports that outline to the shareholder events that have or could affect the organisation. The ease of access and relevance of this information, as well as the substantial

[3] The term espoused is concerned with reporting on what is believed to be true. It is representative of an individuals' 'vision'. It is used in conjunction with this question due to the nature of the data and the overall methodology used. Further explanation is detailed later within this chapter.

time frame on which these reports focus, forms part of the rationale for choosing this data source rather than collecting primary data.

Further rationale for choosing annual reports is the fact that reports produced are factual statements. They are all the more significant as statements such as those made by the Chairperson and CEO are signed showing testimony of truth.

Using the financial year of 2001[4] there is little problem with attaining reports from either the World Wide Web or the organisation. This time frame is also of significance because of the emphasis within New Zealand on the importance of knowledge and in effect this potentially helps with choosing a 'relevant' sample. It is therefore logical to think that there is a possibility of finding evidence of O.L. within these statements to shareholders. Generally speaking, if a subject is regularly within the public domain you would expect this reflected someway throughout reports, an example being the effect on the airline industry of the terrorist attacks in the United States of America.

The next step is to identify 'relevant content' (Harris 2001, Hansen et al 1998). According to Hansen et al (1998:104) "the definition of relevant content should be derived principally from the articulation of the research problem and the theoretical framework of the study…". Using this definition as guidance, as well as other suggestions from authors such as Berger (2000), Harris (2001) and Weber (1990) various aspects of annual reports are targeted. Hansen et al (1998:100) suggest that "it is rarely either possible or desirable to analyse absolutely all… coverage of a subject…For conceptual and, more specifically, for practical reasons…content analysis must start with the selection and narrowing down of the type of coverage to be analysed".

[4] All reports to be used for the study are dated 2001. However, it is important to note that the end of the financial year fluctuates between organisations. This was deemed irrelevant in retrospect of the aims of using this content for analysis. Being any more specific over the time period could also have been considered biased and subjective. Also at the time this research commenced many organisations had yet to release their reports for year ended 2002.

As a result of examining annual reports for 'relevant content', the Chairperson and Chief Executive Officer (CEO) statements within annual reports are chosen. These are considered to be 'relevant' for the following reasons:

- Chairperson's Statement – the nature and role of a Chairpersons position is to view the organisation holistically, as a single entity. Subsequently, this overview of the organisation means that their report, in theory, also takes an holistic perspective. Also significant is that the Chairperson of the Board is not involved with the organisation on a daily basis, again adding to the ability of him/her to view the organisation as a single entity.
- CEO's Statement – is relevant as this perspective is more from an operational viewpoint in that the CEO is more involved in the daily operation of the company. Therefore, the statement given by the CEO, although still holistic, will be more detailed relative to specific functions of the company.

However, there is an issue in using annual reports that relates to 'espoused theory'. The term espoused theory represents an individuals 'belief' when talking of how they react and behave in certain scenarios (Argyris & Schon 1974, Easterby-Smith et al 1999). This however, often differs to 'theories in use' that refers to how individuals are actually driven, a governing behaviour (Argyris & Schon 1974, Easterby-Smith et al 1999). In other words, it is not always possible to differentiate between what is believed to have happened (espoused) versus that of what has actually happened (theories in use). This issue is particularly relevant because of the use of annual reports.

In spite of the difficulty in knowing whether aspects of annual reports are espoused or theories in use, the content is still extremely relevant to the aim of this thesis concerned with finding evidence of whether organisations practice organisational learning. The outcome of using personal statements results in a probability that these may be 'espoused theory'. However, evidence found, even if espoused, is still evidence as it identifies a desire to learn and will add to the body of knowledge surrounding organisational learning.

Step 3. Produce an 'Operational Definition' of the topic to be studied, and determine categories to be analysed.

An operational definition according to Berger (2000) uses pointers from theory and practice to help define particular concepts. In this case it is about looking at what 'actions and behaviours' constitute learning.

Operational definitions were formed by default during the creation of the five tenets of learning. Each of these tenets comprises various components found within the O.L. and L.O. literatures as outlined within Chapter 2, tables 2.3 to 2.7. As discussed, several components were combined and categorised to produce five tenets. This is summarised in table 3.3 below.

Tenet:	**Combining Elements:**
1. Organisation Diagnosis	For example: - Data Collection and analysis - Goal alignment - Performance management - Identify strengths & weaknesses - Benchmarking
2. Challenge Underlying Assumptions	For example: - React to change - Proactive towards change - Experimentation and analysis - Generate new knowledge - Scenario planning
3. Continuous Analysis of Practices / Actions	For example: - Continuous analysis - Strategic planning - Environment awareness - Experimentation - Best practice - Communication systems
4. Emphasise Learning Values	For example: - Structure - Culture - Leadership - Infrastructure
5. Challenge the Learning Process	For example: - Addressing exactly how the organisation currently learns and determining how to learn for the future

Table 3.3 Producing an Operational Definition

Categories to be analysed are concerned with "text characteristics which… should relate directly to the overall research questions…it is important to

include for analysis only those dimensions or characteristics of texts which can be reasonably expected to yield 'useful' information" (Hansen et al 1998:106).

Step 4. Specify the unit of analysis and explain it.

According to Weber (1990) one of the most important decisions made relative to using Content Analysis concerns the unit of text to be analysed, listing several base units such as single words, sentences, themes, paragraphs and even the whole text. Harris (2001:191-208) suggests, the unit of analysis should be "chosen so that it is consistent with the nature of the research question".

The unit of analysis for this study is 'paragraph' and was chosen for several reasons. Firstly, relative to the research question and the need to test for tenets amongst text, paragraph is the best suited unit and the more logical choice. The rationale for this includes the fact that each paragraph is representative of an idea or topic therefore allows the coding process to assess the content for evidence of all five tenets with relative ease. Using a unit of analysis such as 'sentence' could potentially skew the data, as these units may not contain enough relevant information to code effectively.

In choosing paragraph as the unit of analysis, each paragraph from the Chairperson's and CEO's statements was numbered. Each paragraph could then be coded resulting in a table that identified whether each paragraph had 1) specific evidence, 2) non specific evidence or 3) no evidence of the tenet in question. The difference between specific and non specific evidence is illustrated in the following hypothetical excerpt from an annual report. This example is concerned with looking for evidence of Tenet 4 'Emphasise Learning Values', specifically the variable concerned with communication.

Specific Evidence:	Non Specific Evidence:
Air ABC encourages enquiry and dialogue across the organisation and to support this have developed an intranet available to all organisation members.	Air ABC encourages communication across the various functions of the organisation.

Table 3.4 Examining the Differences between Specific and Non Specific Evidence

Step 5. Generate a Coding System

As demonstrated within table 3.4 it was important to break down the tenets into categories to ensure ease of testing throughout the coding process. Because of the need to produce a user-friendly coding system with the aim of increasing reliability, this took the form of a coding sheet that set out clear guidelines as to what to look for when coding each unit of analysis (See appendix 1). As Harris (2001) advocates, the coding scheme should take on a set of categories and coding guidelines that will seek to classify the text in accordance with the overall research question.

In some instances, the categorisation process and the actual coding process are said to have to be 'mutually exclusive' (Harris 2001, Sarantakos 1993). This basically means that only one category can be applied to each unit of analysis, producing a single 'hit' (Harris 2001) or result. However, there is also the method of producing 'multiple hits' (Harris 2001) whereby a unit of analysis may well fit into more than one category. For the purpose of this thesis, the multiple hit approach is taken in regard to coding. This is considered to be the most appropriate method for several reasons. Firstly, using 'paragraph' as the unit of analysis means there is the potential for this section of text to apply to several of the tenets. Coding each unit of analysis and deciding how it 'best fits' into a single category producing a single hit was considered to be of little benefit and restrictive to this thesis. Therefore, if the unit of analysis is consistent with several tenets, each tenet represented results in a hit hence a multiple hit occurs for that particular paragraph. Secondly, this multiple hit approach is appropriate in light of the interconnectedness between each of the tenets, allowing for a more meaningful set of results.

The coding sheet took on many forms before evolving into a scheme felt to be consistent, easy to use and more importantly significant relative to the results it would yield. This coding sheet is illustrated in Appendix 1. To further ensure Inter Coders would understand it, hypothetical examples are given for each variable of the tenets to illustrate how to distinguish between specific and non specific evidence.

Using the coding sheet requires following methodical steps. By identifying the unit of analysis, in this case a paragraph, the coder reads the paragraph and follows by reading each of the categories of tenets as listed on the coding sheet. Taking each tenet step by step, the coder can identify whether there is evidence of the tenet. Dependent upon the content of the paragraph the coder can decide whether to code the paragraph with 1) for specific evidence, 2) for non-specific evidence or 3) for no evidence.

Appendix 1 provides a copy of the coding sheet used to test for Inter Rater Reliability and ease of use (discussed further in the next step). The coding sheet in Appendix 1 is <u>not</u> the coding sheet used to analyse the actual data. The final version of the coding sheet is found in appendix 2 and was developed as a result of feedback from the IRR process.

<u>Step 6. Complete a pilot study including use of Inter Coders to test for Inter Rater Reliability. Revise the coding system.</u>

The purpose of conducting a pilot study is to check the reliability of the coding system (Harris 2001). Having produced a coding sheet, as discussed in Step 5, the next step is to use this sheet to code the content of annual reports and examine its ease of use as well as the reliability in terms of 'reproducibility'.

The pilot study was separated into two key stages. The first stage was to examine how coders viewed the coding sheet and determine whether changes needed to be made. Inter Rater Reliability (IRR), the percentage of agreement between the coders, was also examined. To do this coders were given three

example units of analysis from an annual report, separate to the research sample. Prior to conducting this study the researcher coded these three paragraphs as a means of comparing results and examining any trends and differences between the researcher and coders.

This initial stage was conducted in an open forum, allowing the three coders to ask questions and discuss how they arrived at their response. This purposely allowed the researcher to gain an understanding of how 'outsiders', independent of the topic of O.L., were grasping the content of the coding sheet. The result of this session was two-fold. During the session coders posed several questions mostly of a clarifying nature and it was felt that there would be little agreement between the results of each of the coders. After the session results were examined and the Inter Rater Reliability calculated. The IRR for this session was 71.1% which although fairly high, was under the set target of 80%. After discussion with the coders and determining the IRR the coding sheet was revised. This revision took on board questions that had been raised. These questions included a shared concern by coders that the coding sheet was too complex and comprised of too much information that the coders felt took away the emphasis of the key aspects of each tenet.

In making changes to the coding sheet, each variable had the key aspects underlined and hypothetical examples were removed resulting in less information for coders to absorb. The revised coding sheet can be seen in appendix 2.

A series of questions were added to the coding sheet to address the coder's difficulty in distinguishing between specific and non-specific evidence. Instead of having to decide between specific and non specific evidence, coders simply had to apply each question to the data and respond with a simple yes or no. This simplistic and methodical process produces results that can then be applied to a simple decision rule by the researcher. This determined that if more than one of the three series of questions were answered 'yes' this would be considered 'specific'. Less than two of the three questions answered 'yes'

would be determined 'non specific' and in answering 'no' to all three of the questions would result in 'no evidence'. The ability to apply this decision rule came from the purposefully structured series of questions for each variable of the tenets.

The second stage of pilot coding involved using the same coders with the revised coding sheet but different data to code. In this instance ten paragraphs from the actual research sample were used. Again, prior to this session the researcher coded all ten paragraphs. Each coder was given the revised coding sheet and asked to code each of the 10 paragraphs, but this time coders were asked not to discuss the sheet, simply to answer the questions posed. At the end of the session the results were examined and an IRR calculated at 81.8%, an improvement of 10.7% over the previous session and above the baseline of 80% as set in accordance to Page and Meyer (2000).

The issue of reliability was then taken a step further and the results produced by the coders were compared to the researchers' to produce a percentage of agreement between researcher and Inter Coder. To determine this percentage the agreements between each of the coders and the researcher was calculated. The 'mean' of these three percentages was then calculated producing an agreement of 86.4%.

The rationale for examining this is that if the results produced by the researcher and coders are similar it can be concluded that the coding system is reliable, and results 'reproducible'. As the percentage of agreement between researcher and coders is high and above the baseline set, the reliability of the actual coding sheet and the researchers results is proven. In conclusion, using a staged approach to the pilot study meant that overall reliability for the study increased.

Step 7. Collect data and analyse sample.

The results for each unit of analysis from all ten sample organisations were coded, the end result being a series of tables that illustrated whether there was

specific, non specific or no evidence of the tenets that constitute learning. Using these results the 'frequencies' of each tenet could be calculated. To calculate these frequencies, tenets that had more than one variable, as for tenet 2, 3 and 4, had the number of possibilities of being chosen standardised, ensuring the frequencies were representative of the results attained, and enabling true 'comparison' between each tenet.

These frequencies were then analysed in relation to the research questions posed to help identify areas of text to examine qualitatively against the theoretical framework of learning.

Step 8. Present Findings.

The overall findings are presented in Chapter 4 and discussed from a phenomenological perspective.

To conclude, this chapter examines why Content Analysis is chosen. It examines factors such as the significance of 'reliability' to this thesis, the advantages and disadvantages along with justification for why this method is best suited to the aims of this thesis.

The chapter then examines 'how' to apply Content Analysis, outlining in detail, each specific step in sequence. This illustrates the research questions that frame this thesis and shows how these influence areas of this method such as the compilation of the coding sheet. In following structured steps, typical of Content Analysis, this method ensures that data collection is rigorous and fitting of the research aims.

The next chapter, Findings and Discussion deals with the last two steps of Content Analysis concerned with analysing the sample and presenting the findings.

4.0 – FINDINGS & DISCUSSION

This chapter addresses three subsections, each presenting the results relative to the secondary research questions posed:

1. What are the tenets of O.L.?
2. What are the key tenets espoused by New Zealand organisations?
3. Are New Zealand organisations characterised by Single, Double or Triple Loop Learning?

While presenting the results for each of these secondary research questions, the findings are discussed in light of the overall literature.

Following the review and discussion, the findings are aggregated and reconsidered relative to the overall research question:

- Do New Zealand organisations espouse the tenets of organisational learning?

4.1 What are the Tenets of O.L.?

The first secondary question required developing a framework of what is meant by organisational learning. From an extensive literature review, key points from a variety of perspectives were identified and amalgamated through an iterative process arriving at five core tenets of organisational learning.

1. Organisation Diagnosis
2. Challenge Underlying Assumptions
3. Continuous Analysis of Practices / Actions
4. Emphasise Learning Values
5. Challenge the Learning Process

The creation of these tenets satisfies this first research question.

Chairperson and CEO statements of ten organisations were tested for evidence of these tenets (Chapter 3).

4.2 What are the Key Tenets Espoused by New Zealand organisations?

The following results examine the empirical findings uncovered by the testing process as outlined in Chapter 3. This section discusses each tenet in order relative to the evidence found and the significance of this result respective of the constructs and ideologies of organisational learning.

4.2.1 Tenet 1 – Organisation Diagnosis

It was not considered necessary to test for Tenet 1, 'Organisation Diagnosis', using the coding sheet. The assumption was made that publicly listed organisations, who have a legal obligation to produce annual reports, must identify their strengths, weaknesses, opportunities and threats, benchmark performance against competitors and so on, all of which amount to organisation diagnosis. Therefore, all organisations that produce annual reports demonstrate evidence of the tenet, 'Organisation Diagnosis'.

Elements of this tenet are readily found in the annual reports of the research sample and some examples taken from the Chairperson and CEO statements are illustrated below. However, other aspects of annual reports illustrate further evidence, specifically within the financial reviews that form the basis of these reports and include company wide information.

Examples of diagnosis found within the Chairperson and CEO statements of the ten organisations tested included:

> "United Networks is well positioned to take advantage of the expected future growth in broadband communications, with our competitive advantage being in two key areas. Firstly, our network is low cost, extremely reliable…able to accommodate the growth and security needs of any sized business without further investment. Secondly, our open access wholesale model means that we do not compete with our reseller customers, but add value through our network to the services that they provide their customers". (United Networks Annual Report 2001:9)

The above quote from United Networks shows evidence of diagnosis illustrating that as an organisation they have set themselves a 'road' to follow. In this case the 'road' leads towards growth in broadband communications. In highlighting a 'road' for themselves they have also identified their strengths, which they believe will lead the way for the organisation. They further reinforce evidence of diagnosis through identifying such strengths as these help determine organisational direction and change.

Property for Industry also demonstrates diagnosis in the quote below. Having identified a key weakness (interest rates) that is uncontrollable they have determined a constant threat to their business. In identifying this specific weakness Property for Industry have expanded on how they plan to deal with such a factor by managing the risk. This again shows evidence of organisational diagnosis.

> "Interest costs are PFI's single largest expense item and therefore interest rate risk is carefully managed". (Property for Industry Annual Report 2001:8)

Both United Networks and Property for Industry have begun to look at the bigger picture, typical of organisation diagnosis. In understanding their strengths and weaknesses the organisations can then determine the gaps between current and desired states, which ultimately drives an organisations' desire to learn and improve (Yarrow & Prabhu 1999).

4.2.2 Tenet 2 – Challenge Underlying Assumptions

The first tenet tested using the coding sheet was 'Challenge Underlying Assumptions'. This was represented by two variables, Reactive and Proactive Learning.

Table 4.1 illustrates that seven of the ten organisations had specific evidence of Reactive Learning, whilst nine of the ten had specific evidence of Proactive Learning. The one organisation that stands out is that of United Networks found to have no evidence of either Reactive or Proactive Learning.

Organisation:	Reactive Learning:	Proactive Learning:
Carter Holt Harvey	✓	✓
Contact Energy	✓	✓
Fletcher Building		✓
Fletcher Challenge Forests	✓	✓
Property for Industry	✓	✓
SKY Network Television	✓	✓
Telecom New Zealand	✓	✓
TrustPower		✓
United Networks		
Waste Management	✓	✓

Table 4.1 Specific Evidence of Reactive and Proactive Learning

70% of the overall study showed specific evidence of Reactive Learning this trend coincides with propositions put forward in organisational learning theory. A key proposition within O.L. theory suggests a need for organisations to react to their external environments. Failure to do so results in issues with organisational sustainability and survival.

The argument surrounding Reactive Learning is endorsed by deGeus (1988, 1997, 1998) after his research and findings on 'corporate longevity'. He found many organisations paid little attention to their external environment and were unable to evolve to the same extent as others. Consequently, these organisations were found to have lesser chance of long-term survival. Other authors such as Winjhoven (1995) and Easterby-Smith (1997) also support that organisations need to evolve and change with time. Referring to figure 3.1 in Chapter 3, the sample New Zealand organisations average an age of 65 years. In accordance to the propositions of deGeus, Winjhoven and Easterby-Smith the average age of 65 years for these organisations illustrates that they have in fact evolved over time, especially considering that deGeus (1988) concluded his study saying that the average life expectancy of large corporations is less than 40 years.

The strong evidence found amongst the sample organisations on Reactive Learning suggests that in today's hyper competitive business environment, organisations need to be reactive. The fast pace nature of business and the need to make a decision and implement an action requires a short time frame. As Easterby-Smith et al (1999) advocate, when time is short, decisions must be made swiftly. Restricting the decision-making time suggests that organisations need to react immediately and without much thought and reflection. The evidence uncovered suggests that the organisations studied here are of this mindset.

Reactive Learning also featured to this extent within Chairperson and CEO statements as a way of illustrating to shareholders the organisation's capability of dealing with forces for change, a constant feature in today's business arena.

The following excerpt from Carter Holt Harvey clearly highlights the link to deGeus, Wijnhoven and Easterby-Smith's view of the need to evolve and adapt over time.

> "Carter Holt Harvey has demonstrated over its 100 year history an ability to adapt to and succeed in new conditions. Over the last decade we have encountered a new set of challenges." (Carter Holt Harvey Annual Report 2001:3)

This excerpt from Carter Holt Harvey reveals a certain message to shareholders, in short its ability to successfully adapt and change over 100 years. It is evidential from this excerpt that Carter Holt Harvey is a Reactive Learner, highlighting their espoused ability to adapt and succeed when faced with new market conditions and challenges.

Evidence of Reactive Learning is also found later in the report:

> "Australasian companies have not been immune from these global forces, and they have had to deal with additional local issues that have impacted on their businesses. In New Zealand, for example, the forest products industry has changed markedly. Increasing supply, lowering of tariffs and the entry of new players have made the New Zealand

> domestic market extremely competitive…These conditions have taken their toll, as evidenced by the passing of Fletcher Paper and the receivership of the Central North Island Forest Partnership." (Carter Holt Harvey Annual Report 2001:3).

This paragraph illustrates Carter Holt Harvey's awareness of their operating environment, discussing how environmental forces have impacted upon their industry. They pinpoint particular forces that need careful observation.

However, this excerpt also talks about the consequences of these forces for change and specifically how these have detrimentally effected two organisations within the industry. By introducing information on the consequences of change within this same paragraph, the organisation also shows evidence of being 'proactive'.

Carter Holt Harvey demonstrate that they are aware of their competitive environment and understands that action must be taken to address this issue and ensure their fate is different to that of Fletcher Paper and Central North Island Forest Partnership.

Carter Holt Harvey is just one of seven organisations whose Chairperson and CEO considers Reactive Learning important enough to warrant its mention within annual reports.

Despite the basic argument that 'reactive' organisations are 'learners' there are those that reject this proposition. Authors such as Rowden (2001) and Korth (2000) take issue with organisations being termed learners simply because they react to the external environment.

Rowden (2001) suggests organisations that only adopt a Reactive Learning strategy cannot reap the purported benefits of organisational learning, as they, as an entity, are not doing enough to warrant such benefits. Korth (2000) agrees with this view implying that adapting to change through instantaneous,

remedial action, means the organisation disregards their underlying assumptions and values.

As suggested with the above excerpt from Carter Holt Harvey there is evidence of Proactive Learning. Results found 9 of the 10 organisations had evidence of this variable, perhaps suggesting that Reactive Learning alone is insufficient.

Literature on organisational learning discusses the premise that change should be accepted as a constant factor. It addresses the continual forces within the external environment that can affect the organisation in the short and long-term. With the understanding that change is constant and that there is a need for a long-term focus, Proactive Learning transpires.

The following excerpt from Carter Holt Harvey demonstrates Proactive Learning.

> "In this report we discuss some of the issues associated with the forest products industry in Australasia. We look at our response, not just to the economic conditions encountered in the last year, but also to the wider influences on our business…To discuss how we are approaching the future, we first need to consider the recent past." (Carter Holt Harvey Annual Report 2001:9).

Carter Holt Harvey illustrates that they have assessed the markets in which they operate and reacted to aspects of it. However, they then go beyond 'reaction' to assess further influences on the organisation, illustrating their ability to look beyond the current situation toward future possibilities. This is very much aligned with the key concepts of Proactive Learning, predominantly concerned with identifying and analysing potential strategies for the organisation. Rather than looking to solve a problem immediately with remedial action, 'proactive' organisations examine several options, their consequences (Ramsey & Sinha 2002) and merit before making a decision to best suit the organisation.

The following quote from Waste Management also shows aspects of Proactive Learning:

> "The highlight of the year was the award of a new 15 year…contract…it is one of the largest and longest term contracts ever won by the company and the benefits to Waste Management are significant. It represents an exciting opportunity for the company to develop a long-term partnership in this growing area of New Zealand and satisfy its waste minimisation and management goals". (Waste Management Annual Report 2001:4).

Waste Management illustrate their capability to look at the organisation from a long-term perspective. Having been awarded a long-term contract the organisation is aware that the consequences of this are multiple opportunities for the future. In particular, this gives the organisation an opportunity to work on and satisfy their ultimate goals, demonstrating their ability to think and act proactively.

Proactive Learning also means organisations are likely to change their values, strategies and assumptions (Argyris & Schon 1996) and align them to meet the organisations changing objectives. It is similar to adopting best practice, but rather than an emphasis on productivity the emphasis is on supporting the overall learning process.

Proactive Learning involves going beyond the current situation and looking to the future. The argument put forward by Pemberton & Stonehouse (2000) is that if the organisation looks beyond remedial action and actually looks to develop ideas and principles, it will result in better organisational behaviour. Using knowledge and past experiences the organisation can project future scenarios to possible and hypothetical change. As Korth (2000) argues, organisations need to find or create new problems to which they should produce solutions.

The importance of being proactive in today's environment is high. Organisations that do not examine and make appropriate changes to the underlying assumptions and values become rigid (Korth 2000). Subsequently,

organisations increase the risk of becoming less able to positively deal with forces for change and other influences that can affect them.

This emphasis on Proactive Learning suggests that the sample organisations have come to realise that reacting to forces for change, if and when they happen, is not sufficient within today's business arena. Instead, organisations must accept change as constant and work on examining and analysing the potential affect this may have on the organisation. This would appear to be the trend of the sample, with 90% of the Chairperson's and CEO's espousing Proactive Learning.

In summary, the following bar graph illustrates specific and non specific evidence for each of the ten organisations.

FIGURE 4.1

This graph illustrates that of the two variables Reactive and Proactive Learning, the most prevalent amongst the ten organisations was Proactive Learning. This concentration of evidence, both specific and non specific highlights the espoused importance of being 'proactive' in today's business arena, as reflected within annual reports. Carter Holt Harvey and Waste Management each illustrate notable evidence of this variable.

In conclusion, it is clear that the majority of the organisations studied show evidence of both reactive but predominantly proactive learning. With this proof of Proactive Learning it suggests that these organisations do 'Challenge' their 'Underlying Assumptions'.

4.2.3 Tenet 3 – Continuous Analysis of Practices / Actions

The next tenet tested was 'Continuous Analysis of Practices / Actions'. This tenet was evident amongst all ten organisations studied. Specific evidence uncovered is illustrated within the following table.

Organisation:	Prior Research, Analysis & Preparation:	Experimentation & Questioning:	Review, Understand & Act:
Carter Holt Harvey	✓		✓
Contact Energy			✓
Fletcher Building	✓		✓
Fletcher Challenge Forests	✓		✓
Property for Industry	✓	✓	✓
SKY Network Television	✓		✓
Telecom New Zealand	✓		✓
TrustPower	✓		✓
United Networks		✓	✓
Waste Management	✓		✓

Table 4.2 Specific Evidence of the Variables of 'Continuous Analysis of Practices / Actions'.

This evidence aligns itself with the proposition within the literature that suggests the need for organisations to continually analyse and review past experiences and lessons learned. The idea is to draw upon this 'knowledge' to determine the best course of action for the organisation (Pemberton & Stonehouse 2000).

The premise of this tenet is that once an action is implemented the organisation should continue to examine and experiment with the 'action' to ensure best practice is adopted. As Fulmer & Gibbs (1998) report, organisations should continually realign current and potential actions to meet changing circumstances.

> "…In comparison to the alternative approaches considered, the placement allowed the Company to raise the capital required very economically and minimised exposure to adverse market conditions and dilution of earnings / asset banking." (Property for Industry Annual Report 2001:3).

The above quote shows that Property for Industry illustrate their ability to examine their options before deciding on a resolution. This aligns with theory that suggests alternative actions and their consequences be considered before implementing a 'best practice' strategy.

However, the proposition does not stop with experimentation. After implementation of a specific action, those within the organisation should theoretically continue to focus their attention toward reviewing the course of action taken. This should include the consequences this had (deGeus 1998), and provide details of what was learnt ('new knowledge') across the organisation. Specifically, the dissemination of this knowledge is considered important (Poell et al 2000, deGeus 1998).

In the following statement by Carter Holt Harvey they highlight the importance of research to their shareholders. They discuss research performed on top U.S. companies for factors that contribute to revenue and profit. They found that new products and services are responsible for higher profit rates. Using this information Carter Holt Harvey are designing a programme targeting new products and services in a bid to generate 30% of its revenue from these.

> "Research has shown the top companies in the United States get a high percentage of profits from new products and services. We now have a targeted programme…to secure 30% of our revenues from new products and services by the end of 2004." (Carter Holt Harvey Annual Report 2001:7).

The excerpt above clearly illustrates Carter Holt Harvey's use of research to help determine its best course of action relative to its objectives, in this case an increase to the bottom line.

SKY Network Television in the quote below also show evidence of 'Continuous Analysis of Practices / Actions' reporting on a benchmarking exercise that compared SKY against a successful company within the same industry. Again, this relates back to the proposition that suggests the use of benchmarking and alike should occur if organisations are to adopt best practice.

> "…compare the position of SKY to another News Corp family member, the highly successful UK satellite broadcaster BSkyB." (SKY Network Television Annual Report 2001:4).

The following graph (figure 4.2) illustrates specific and non specific evidence of this tenet for each of the ten sample organisations.

Figure 4.2

The majority of organisations within the sample despite having evidence had little of it when it came to specific evidence. However, non specific evidence for all three variables of this tenet was particularly prevalent.

In conclusion, it is apparent that of the organisations studied, many of the Chairperson's and CEO's had mentioned the use of prior research and analysis before deciding on what action to take. It is also clear that the majority of these organisations discussed their actions after the fact, illustrating evidence of the variable 'Review, Understand and Act'. However, of the ten organisations only two of these displayed specific evidence of the variable 'Experimentation and Questioning'. This trend suggests that organisations consistently review past actions before implementing new ones but are slower taking up the opportunity to continuously experiment with and question these actions in order to ensure the organisation adopts best practice.

4.2.4 Tenet 4 – Emphasise Learning Values

'Emphasise Learning Values' was the next tenet tested. Evidence was found but to a lesser extent than the previous tenets. For some organisations within the research sample such as Contact Energy, Property for Industry, SKY Network Television and Telecom New Zealand this tenet was weak and in some instances non existent. Specific and non specific evidence for each organisation is illustrated in the following table.

Organisation:	Specific Evidence	Non-Specific Evidence	Infrastructure:	Structure:	Culture:	Leadership:
Carter Holt Harvey	✓	✓	✓	✓	✓	✓
Contact Energy		✓	✓			
Fletcher Building	✓	✓	✓	✓		
Fletcher Challenge Forests		✓	✓	✓		
Property for Industry						
SKY Network Television		✓	✓			
Telecom New Zealand						
TrustPower		✓	✓		✓	
United Networks		✓	✓	✓		
Waste Management	✓	✓	✓	✓	✓	✓

Table 4.3 Specific and Non Specific Evidence of 'Emphasise Learning Values'

Aligned with the model of O.L. given in Chapter 2, this tenet is not concerned with the 'processes' within the organisation, instead, it examines the organisations 'construct', assessing infrastructure, structure, culture and leadership.

The key proposition within the literature suggests that organisations wanting to 'learn' should not only examine their processes but also examine how they can support learning through organisational construct. Infrastructure, structure, culture and leadership are all said to have the potential to either help or hinder learning (Pemberton & Stonehouse 2000).

Within the literature it is suggested that the flatter the organisations structure, the better the information flow (Smith 1999, Poell et al 2000). The better the information flow, the more the organisation is able to share experience and knowledge. To support the creation of new knowledge a certain degree of

support and trust is needed and this allows the individuals within the organisation to test and trial new ideas and processes (Pemberton & Stonehouse 2000, Rowden 2001). And lastly, to help promote this supportive culture, the leadership style must be more servant than commanding (Senge 1997).

Out of the ten organisations studied, specific evidence was found for three of the four variables of the tenet 'Emphasise Learning Values', these being 'Emphasis on Communication', 'Less Autocratic' and 'Leadership Style'. Whilst non specific evidence was found in all four variables including 'Supportive Culture'.

Variable	Specific Evidence	Non Specific Evidence
Emphasis on Communication	**2** organisations - Carter Holt Harvey - Waste Management	**8** organisations - Carter Holt Harvey - TrustPower - Fletcher Building - SKY Network Television - Contact Energy - United Networks - Waste Management - Fletcher Challenge Forests
Less Autocratic	**2** organisations - Fletcher Building - Carter Holt Harvey	**5** organisations - Fletcher Building - United Networks - Waste Management - Carter Holt Harvey - Fletcher Challenge Forests
Supportive Culture	**0** organisations	**3** organisations - TrustPower - Waste Management - Carter Holt Harvey
Leadership Style	**1** organisation - Carter Holt Harvey	**2** organisations - Waste Management - Carter Holt Harvey

Table 4.4 Specific and Non Specific Evidence Variables of 'Emphasise Learning Values'.

This evidence suggests that the sample organisations address the organisational construct. However, within the Chairperson and CEO statements there is a concentration of evidence relative to communication and structure, but lesser evidence of culture and leadership.

The following excerpts demonstrate the evidence found for this tenet, addressing infrastructure, structure, culture and leadership.

> "Our i2b [ideas to business] programme has been exceptionally successful in engaging a wide cross-section of our employees in idea generation. Over 1,000 employees… submitted a new business idea last year – a phenomenal result." (Carter Holt Harvey Annual Report 2001:7).

This excerpt demonstrates that Carter Holt Harvey is aware of the importance of idea and knowledge generation. It suggests that idea generation is a vital part of their business, which indicates that employees feel safe to suggest and experiment with new ideas and ways of thinking. This is aligned with the proposition within the literature that suggests that a supportive culture is required if individuals are to experiment and be innovative (Marsick & Watkins 1999, Pemberton & Stonehouse 2000, Rowden 2001).

TrustPower, in the following quote, suggest that overall they have a team-based culture. Again this links with theory suggesting that for learning to take place, a supportive culture must prevail.

> "Principle drivers of our Team's culture are dedication to the job in hand and delivering good outcomes for all our stakeholders." (TrustPower Annual Report 2001:6).

In the paragraph below, Carter Holt Harvey demonstrates to their shareholders that a restructure of the organisation has occurred. They focus on performance, innovation and leadership, all of which are aligned to the proposition of addressing organisational construct to emphasise and promote learning.

> "Our response has been to progressively restructure every aspect of our company. We are doing this through initiatives focused under the themes of Performance (to drive towards international competitiveness), Innovation (to provide growth opportunities) and Leadership (to shape the industries we participate in)." (Carter Holt Harvey Annual Report 2001:3)

Waste Management also espouse evidence of 'Emphasise Learning Values' by placing emphasis on the knowledge and experience of its members. This suggests that the organisation has a culture that rates its staff highly and is supportive of them, as evident with the following excerpt.

> "In the eyes of our customers and other stakeholders our people are in fact the company – they embody its very character and worth. I would therefore like to congratulate our employees and contractors for their unstinting efforts and commitment throughout what has been in some respects a testing year. Waste Management is exceptional in our industry and not only in having a very high number of highly qualified staff, but also in having a large proportion who have accumulated many years of experience with the company." (Waste Management Annual Report 2001:8)

Fletcher Building also illustrate evidence of this tenet when addressing their structure and infrastructure. The structure of the organisation and the hierarchical nature of the company is discussed with comments made relative to the flatter and broader structure. However, this paragraph below also has evidence of the organisation relative to communication. It discusses how the flatter structure results in a level of management being removed, with many positions reporting directly to the CEO. This demonstrates that communication will have an increased flow across the depth of the organisation.

> "The company has now been organised around four separate operating groups. Each is headed by a chief executive overseeing a range of businesses with a common discipline at its core. The broader, flatter organisation structure should allow each chief executive more time to devote to new initiatives such as new products, new processes, new technologies, or new complementary business activities. The broader structure did not require the creation of new positions; it simply required some existing positions to report directly to the Fletcher Building CEO, rather than through an additional level." (Fletcher Building Annual Report 2001:4)

The following graph illustrates the evidence, both specific and non specific evidence found for this tenet, 'Emphasise Learning Values'. This allows for a comparative illustration of each organisation.

Figure 4.3

This graph illustrates that in eight of the ten organisations studied, the Chairperson's and CEO's espoused the need to address organisational construct in order to support learning, hence 'Emphasise Learning Values'. However, two of ten organisations, specifically Property for Industry and Telecom New Zealand displayed no evidence of this tenet illustrating their lack of focus on organisational construct comparative to the other organisations studied.

In conclusion, evidence of 'Emphasise Learning Values' has been found, but to a lesser extent than the previous tenets analysed. This suggests that the Chairperson's and CEO's of the organisations studied did not greatly discuss the importance of aspects such as leadership, structure, infrastructure and culture. These variables of the tenet 'Emphasise Learning Values' are linked to the construct of the organisation, therefore this evidence suggests that learning is not supported to the extent that changes to the organisations construct are made to a large extent as to support the learning process.

4.2.5 Tenet 5 – Challenge the Learning Process

The last tenet to feature on the coding sheet was that of 'Challenge the Learning Process'. This tenet is concerned with whether organisations within the sample display any evidence of understanding how it is they actually learn, known as Triple Loop Learning.

Testing uncovered no evidence of this tenet amongst any of the ten organisations studied.

Within the theory of O.L. and L.O. Triple Loop Learning is concerned with the organisations need, and ability, to look at the way in which they learn (Isaacs 1993, 1004, Pemberton & Stonehouse 2000). Organisations examine their learning method and decipher information from past experiences in a bid to understand, and effectively learn how it is they learn as an organisation, and how to continuously improve on learning.

To be able to achieve Triple Loop Learning, the organisation must not only examine its processes and adopt best practice, but it must also examine the construct of the organisation in order to support and promote learning. This is not something espoused by the Chairperson or CEO of any of the organisations studied.

The evidence prior to this tenet helps explain why this was not found. There was an abundance of evidence of Tenet 2 and 3, 'Challenge Underlying Assumptions' and 'Continuous Analysis of Practices / Actions' constituting 'process' yet when it came to Tenet 4, 'Emphasise Learning Values' linked to 'construct' lesser evidence was found. This may suggest, in accordance to the model of O.L. in Chapter 2, that the organisations within the sample are learners in so far as they address process. However, with less evidence of Tenet 4 this suggests some of these organisations adopt a learning strategy that seemingly discounts the need to address organisational construct. As outlined in the previous paragraph, to be able to achieve Triple Loop Learning, the organisation must scrupulously address both process and construct.

4.2.6 Summary of Evidence

The evidence provided within section 4.2 shows that all of the organisations studied practice organisational learning to some degree. The following graph gives a more detailed account of the degree of importance placed on each tenet by the Chairperson and CEO of each organisation.

Figure 4.4

This graph clearly illustrates that despite the variability of evidence, with concentrations within specific areas, there is evidence that these tenets are prevalent within the organisations studied. The exception being the variable 'Leaning how to Learn' from tenet 5, 'Challenge the Learning Process', that was absent from all ten organisations.

Organisations that particularly stand out from this study include Carter Holt Harvey and Waste Management, both having strong evidence of several of the variables such as 'Proactive Learning', 'Prior Research, Analysis & Preparation' and 'Review, Understand & Act'. Fletcher Challenge Forests are also comparatively strong when compared to the remaining 7 organisations, specifically with the variable 'Reactive Learning'.

However, despite singling out some of the organisations studied, the fact remains that all ten organisations show signs of organisational learning. It can therefore be concluded that the reservation held as to whether O.L. can be practiced (Argyris & Schon 1996) is insignificant, as organisational learning is active, thus not a theoretical notion.

4.3 Are New Zealand Organisations Characterised by Single, Double or Triple Loop Learning?

Having discussed the evidence uncovered for each of the tenets the question as to whether these organisations are characteristic of Single, Double or Triple Loop Learning can be explored.

Single, Double and Triple Loop Learning represent levels of learning that characterise an organisation dependent upon the organisations efforts relative to learning, linked to the use of tenets.

Although we have examined whether the five tenets were present in the organisations studied, no conclusion was reached regarding the level of learning prevalent. By assessing whether these organisations are characterised by Single, Double or Triple Loop Learning it is easier to draw conclusion on the

primary research question; Do New Zealand organisations espouse the tenets of organisational learning?

This section examines the data from both a positivist and phenomenological perspective highlighting whether the sample organisations were characterised by Single, Double or Triple Loop Learning, by assessing the frequency of tenets, and exploring the results further with excerpts from annual reports. Reference to the theoretical framework of organisational learning is also made.

Table 4.3 below illustrates a concentration of evidence that supports Double Loop Learning, concluding that all ten sample organisations are predominantly learners to the extent that they can be classed Double Loop Learners. The table illustrates that each of the variables helps constitute different styles of learning, from Single Loop through to Triple Loop. The following sections take a closer look at these learning styles in relation to the evidence found.

Tenet	**Tenet Variables**	**Specific Evidence**	**Non Specific Evidence**
Challenge Underlying Assumptions	Reactive Learning	4.5%	10.4%
	Proactive Learning	10.7%	30.3%
Continuous Analysis of Practices / Actions	Prior Research and Analysis	2.1%	18.3%
	Experimentation & Questioning	0.5%	8.8%
	Review & Understand	13.3%	38.4%
Emphasise Learning Values	Emphasis on Communication	0.5%	10.2%
	Less Autocratic	0.5%	3.6%
	Supportive Culture	0%	1.7%
	Leadership Style	0.2%	1.7%
Challenge the Learning Process	Learning how to Learn	0%	0%

Table 4.5 Establishing between Single, Double and Triple Loop Learning

Theory suggests that organisations that are solely 'reactive' are prone to Single Loop Learning. Whereas organisations that are both 'Reactive' and 'Proactive' are in all probability characteristic of Double Loop Learning.

If organisations within the sample had evidence of Reactive Learning but not Proactive Learning they would be characterised as Single Loop Learners. However, the evidence presented throughout this chapter illustrates that the organisations were found to have both Reactive and Proactive Learning evident and are therefore considered Double Loop Learners.

The following excerpts demonstrate examples of Double Loop Learning.

> "All of these changes influence the business environment and the opportunities it creates… it is important… to understand how we are responding to economic and industry conditions in order to build a sustainable future." (Carter Holt Harvey Annual Report 2001:3).

Carter Holt Harvey demonstrates that as an organisation they react to influences within the external environment to ensure sustainability, showing evidence of 'Reactive Learning'. However, the organisation then talks about the need to understand how it responds to change, which shows a deeper level of learning, beyond remedial action, suggesting that Proactive Learning is evident within this organisation.

> "…New approaches are therefore necessary for a successful company in this industry to create a sustainable future." (Carter Holt Harvey Annual Report 2001:3).

This excerpt (also from Carter Holt Harvey) demonstrates their awareness of the need to address forces for change with new ideas and approaches to business, again with an emphasis on sustainability.

Carter Holt Harvey talks of responses to "economic and industry conditions" and informs the shareholder that to be sustainable new approaches are needed, illustrating their intent to think ahead of change and be proactive.

As evidenced throughout this chapter none of the organisations espoused the tenet 'Challenge the Learning Process'. Aligned with propositions throughout O.L. theory it is conclusive that Triple Loop Learning is not characteristic of the organisations studied.

4.4 Do New Zealand Organisations Espouse the Tenets of Learning? A Summary of the Overall Findings.

Findings show that tenets that constitute organisational learning are prevalent among the annual reports of 10 New Zealand organisations. Specifically, the tenets 'Organisation Diagnosis', 'Challenge Underlying Assumptions', 'Continuous Analysis of Practices / Actions' and 'Emphasise Learning Values' were found. Overall, when related to O.L. theory this research illustrates that organisational learning is practiced.

Table 4.6 shows the frequency of specific and non specific evidence found including the overall result of the study.

Tenet	Specific Evidence	Non Specific Evidence
Challenge Underlying Assumptions	7.6%	20.4%
Continuous Analysis of Practices / Actions	5.3%	21.8%
Emphasise Learning Values	0.3%	4.3%
Challenge the Learning Process	0	0
Overall Result (=evidence found divided by 4 for the number of tenets tested)	3.3%	11.6%

Table 4.6 Overall Results for Espoused Tenets of Learning

The study found that of the ten organisations, of which a total of 422 paragraphs were coded and analysed, 3.3% of these contained 'Specific Evidence' of the tenets of learning and 11.6% contained 'Non Specific Evidence'.

Due to the nature of the study and the use of annual reports this evidence can only be reported as espoused theory rather than theories in use. However, this evidence is still extremely relevant and these findings help to close the gap between theory and practice. The research has clearly identified evidence of

organisations practicing learning, finding various tenets of learning to be prevalent. The importance of O.L. within the business world is clearly reflected through the statements made by the Chairperson's and CEO's of ten leading New Zealand organisations.

4.4.1 Is Knowledge Power?

As discussed in Chapter 3 a reason for choosing New Zealand organisations was due to the emphasis within New Zealand on 'knowledge' and the Knowledge Economy. During the coding process it was apparent that several organisations considered knowledge to be significant.

The significance of knowledge was particularly evident within statements of Carter Holt Harvey and Waste Management.

> "In New Zealand we took a primary role as a sponsor and major contributor to the Catching the Knowledge Wave conference, organised by The University of Auckland in partnership with business, Government and community organisations. It examined how New Zealand could make the shift from being an economy dependent on primary resources to one driven by ideas, a 'knowledge society'." (Carter Holt Harvey Annual Report 2001:5)

It is apparent from this excerpt that Carter Holt Harvey does more than espouse the importance of knowledge in today's environment. Instead, they are advocates of the importance of knowledge evidenced by their involvement with the Knowledge Wave conference and their focus on the knowledge society within New Zealand.

> "Many of the recommendations from the Knowledge Wave conference are now being actioned through the Knowledge Wave Trust…We have also contributed to the development of a balanced scorecard for New Zealand that will help measure progress towards important economic, environmental and social goals." (Carter Holt Harvey Annual Report 2001:5)

Again, Carter Holt Harvey confirm that knowledge is key to their organisation and that they are actively involved in communicating the importance of knowledge across the New Zealand business arena.

Evidence also comes from statements within Waste Management's annual reports.

> "We are continually evaluating new opportunities to grow the business where we can leverage off our intellectual knowledge in order to add value for our shareholder". (Waste Management Annual Report 2001:7)

Waste Management demonstrate the importance of knowledge sharing across their organisation when talking about the need to leverage knowledge to add value to the business.

> "Waste Management's capabilities involve activities that tend to be based on knowledge rather than ownership of assets. They are our intellectual property and most importantly transferable offshore. In large multinationals this know-how is usually captured in policy and procedures manuals and technical libraries. For a smaller business such as ours we look to the knowledge and experience of our people to leverage these capabilities into new markets"." (Waste Management Annual Report 2001:10)

Waste Management expand on the significance of knowledge by illustrating clearly to the shareholder that this is considered an asset to the organisation, more so than other tangible assets. Waste Management espouse that knowledge enables them to sustain market capability.

Evidence of this nature illustrates that some organisations are clearly recognising the importance of knowledge. What this demonstrates is that a selection of the sample organisations are of the mindset that knowledge is an asset that can benefit the overall organisation.

This evidence suggests that Bacon's 400-year-old proposition, 'Knowledge is Power', is still extremely pertinent to this day. It also suggests that within New

Zealand, businesses are waking up to the fact that knowledge is crucial and therefore organisational learning is fundamental.

4.5 Limitations and Future Research

A major limitation to this research relates to the research design. The research design adopted does not distinguish between espoused theories and theories in use. This means that in effect the evidence presented throughout this chapter is indicative of the Chairperson's and CEO's visions, in that what they believe is of importance is what they discuss throughout their statements addressed to shareholders. It could be argued that these written statements are, or are not, likely to be reflective of the organisations actions. Only time will tell.

As the difference between whether the Chairperson and CEO of each organisation is reporting on espoused theory or theories in use cannot be proven, a potential gap for further research arises. Further studies could involve making contact with these actual organisations and performing a study to ascertain whether the evidence of organisational learning is more than 'espoused theory'. This would further help to bridge the gap between those who accept O.L. theory but doubt its practice.

If further research is able to determine between espoused theory and theories in use, then the gaps between theory and practice can be further addressed, resolving questions and challenges such as organisational learning as 'paradoxical'. This study has already begun to weaken this argument of O.L. as paradoxical with the evidence unearthed. If theories in use were found this proposition could be rejected.

Further empirical studies could also address the gap of whether organisational learning is beneficial. If organisational learning is practiced, which this study believes it is, it is important to then find if this actually leads to improved performance. For example, having concluded throughout this chapter that Carter Holt Harvey appear to be good contenders for a 'learning organisation', near completion of this thesis they announced to their markets that earnings

were to be lower than projected. In turn this saw the overall share price for this organisation fall by 3.2% (http:/nzherald.co.nz/business 2003), reflecting poorer performance. If organisational learning is beneficial in that it is believe to improve overall performance, why is it that Carter Holt Harvey are announcing a profit downfall?

It is clear that further empirical studies are needed. With this research design being easily replicable, perhaps the first step should be to expand upon the research sample size to gain further evidence of what extent organisations are adopting organisational learning.

This study has been exploratory with the aim of building on the theory of organisational learning, and has taken the first step towards linking theory to practice. Any further research that manages to synthesise and build upon the theory of organisational learning to help overcome its fragmented, incoherent nature and lack of authentication is encouraged.

5.0 – CONCLUSION

Focus on organisational learning has intensified dramatically in recent years, and for good reason. Economic attention has turned from tangible resources to investing in intellectual capital, with an emphasis on knowledge generation and dissemination enabled through 'learning'. This increased focus has partly come about due to the proposition that O.L. can enhance competitive sustainability. This is particularly important due to the fiercely competitive environments with which organisations must contend.

The literature on organisational learning has become fragmented due to an explosion of interest on the topic. As a result, O.L. is full of subjective theories and strategies, with little empirical evidence to either support or reject these theoretical propositions. The review of literature in Chapter 2 identified four key challenges fundamental to O.L. theory:

1. Lack of cohesion due to fragmented literature
2. Scepticism over whether organisations as an entity can learn
3. Scepticism over the 'practice' of O.L.
4. Scepticism over the 'benefits' of O.L.

This thesis addressed two of these challenges concerned with the lack of cohesion and scepticism over 'practice'. To address the lack of cohesion, key aspects of the literature were examined, extracted and integrated to develop five tenets that together constitute learning. Testing for evidence of these tenets within New Zealand organisations enabled the scepticism surrounding the 'practice' of O.L. to be addressed.

The focus on extraction and integration of the literature resulted in the following core tenets:

1. Organisation Diagnosis
2. Challenge Underlying Assumptions

3. Continuous Analysis of Practices / Actions
4. Emphasise Learning Values
5. Challenge the Learning Process

In constructing these tenets the ideologies and propositions concerned with what constitutes O.L. have become more coherent. Thus, the challenge relating to fragmentation was addressed.

The outcome of testing found compelling evidence that all ten of New Zealand's leading organisations, from the NZSE40, had evidence of organisational learning. Analysis led to the conclusion that the organisations studied were 'learning organisations' to the extent that they could be classed 'Double Loop Learners', characteristic of:

- adapting to forces for change
- forward planning, scenario planning
- adopting best practice
- addressing 'process' & 'construct' to support learning

The evidence presented in Chapter 4 supports the notion that organisational learning is practiced. Consequently, this evidence should reduce the scepticism surrounding the application of O.L. theory.

A key implication of this study is that rather than continue to develop diverse and often contradictory theories of O.L., focus needs to be on the synthesis and testing of existing ideologies and propositions. In line with this, more research is needed to provide empirical evidence on the 'practice' and 'benefits' of organisational learning. The greater the amount of empirical research the more coherent the topic of organisational learning will become. Furthermore, the more coherent, the easier it will be to understand and grasp the concept of learning that influences an organisation as an entity.

The focus on organisational learning will increase further with the organisations need to secure knowledge and intellectual capital in a bid to enhance

sustainability. With organisations making every effort to compete and survive within the dynamic and fiercely competitive environments, O.L. is becoming common practice.

REFERENCES

Argyris, C. & Schon, D.A. (1974). Theory in Practice: Increasing Professional Effectiveness. Jossey-Bass Publishers. San Francisco.

Argyris, C. & Schon, D.A. (1978). Organizational Learning: A theory of action perspective. Addison Wesley Publishing. Reading, Massachusetts.

Argyris, C. & Schon, D.A. (1996). Organizational Learning II: Theory, Method and Practice. Addison-Wesley Publishing Company. Reading, Massachusetts.

Argyris, C. (1993). Education for Leading Learning. Organizational Dynamics.21(3):4-18.

Argyris, C. (1998). In Fulmer, R.M. & Bernard, K.J. (1998). A Conversation with Chris Argyris: The Father of Organizational Learning. Organizational Dynamics.27(2)pp21-33.

Argyris, C. (1999). On Organizational Learning. Blackwell Publishers Ltd. Oxford.

Ayas, K. (1996). Professional Project Management. In: Poell, R.F., Chivers, G.E., Van der Krogt, F.J. & Wildemeersch, D.A. (2000). Learning-Network Theory. Management Learning.31(1):25-49.

Belanger, L. (2000). Organizational Diagnosis and Assessment: Bridging Theory and Practice. Relations Industrielles.55(2):368.

Berelson, B. (1952). Content Analysis in Communication Research. In: Hansen, A., Cottle, S., Negrine, R. & Newbold, C. (1998). Mass Communication Research Methods. New York University Press. New York.

Berg, B.L. (1998). Qualitative Research Methods for the Social Sciences. In: Harris, H. (2001). Content Analysis of Secondary Data: A study of courage in managerial decision making. Journal of Business Ethics.34(3):191-208.

Berger, A.A. (2000). Media and Communication Research Methods: An Introduction to Qualitative and Quantitative Approaches. Sage Publications, Inc. Thousand Oaks.

Bohm, D. (1989). On Dialogue. In: Fulmer, R.M. & Gibbs, P. (1998). The Second Generation Learning Organizations: New tools for sustaining competitive advantage. Organizational Dynamics27.(2):6-21.

Campbell, D. (1969). Variation and Selective Retention in Socio-Cultural Evolution. In: Arygris, C. (1999). On Organizational Learning. Blackwell Publishers Ltd. Oxford.

Center for Managerial Learning and Business Simulation. In: Fulmer, R.M. & Gibbs, P. (1998). The Second Generation Learning Organizations: New Tools for Sustaining Competitive Advantage. Organizational Dynamics.27(2)pp6-15.

Daft, R. & Marcic, D. (1998). Understanding Management. In Rowden, R.W. (2001). The Learning Organization and Strategic Change. S.A.M. Advanced Management Journal.66.(3)pp11-18.

Davenport, S. & Bibby, D. (1999). Rethinking a national innovation system: The small country as 'SME'. Technology Analysis and Strategic Management.11.(3):431-462.

deGeus, A.P. (1988). Planning as Learning. In Kolb, D.A., Rubin, I.M. & Osland, J. (1995). Organisational Behaviour: an experiential approach.(41-67). Prentice Hall International Inc.

deGeus, A.P. (1997). The Living Company. In: Fulmer, R.M. & Gibbs, P. (1998). The Second Generation Learning Organizations: New tools for sustaining competitive advantage. Organizational Dynamics27.(2):6-21.

deGeus, A.P. (1998). Why some companies live to tell about change. The Journal for Quality and Participation 21.(4):17-21.

Dixon, N. (1994). The Organisational Learning Cycle. In Korth, S.J. (2000). Single and Double Loop Learning: Exploring Potential Influence of Cognitive Style. Organization Development Journal.18.(3)pp87-98.

Easterby-Smith, M. (1997). Disciplines of Organizational Learning: Contributions and Critiques. In: Poell, R.F., Chivers, G.E., Van der Krogt, F.J. & Wildemeersch, D.A. (2000). Learning-Network Theory. Management Learning.31.(1):25-49.

Easterby-Smith, M. (1997). Disciplines of Organizational Learning: Contributions and Critiques. In: Easterby-Smith, M., Burgoyne, J. & Araujo, L. (1999). Organizational Learning and the Learning Organization: Developments in theory and practice. Sage Publications. London.

Easterby-Smith, M., Burgoyne, J. & Araujo, L. (1999). Organizational Learning and the Learning Organization: Developments in theory and practice. Sage Publications. London.

Fiol, C.M. & Lyles, M.A. (1985). Organizational Learning. In: Easterby-Smith, M., Burgoyne, J. & Araujo, L. (1999). Organizational Learning and the Learning Organization: Developments in theory and practice. Sage Publications. London.

Frankfort-Nachmias, C. & Nachmias, D. (1996). Research Methods in the Social Sciences. In: Harris, H. (2001). Content Analysis of Secondary Data: A study of courage in managerial decision making. Journal of Business Ethics 34.(3):191-208.

Fritz, R. (1989). The path of least resistance. In: Smith, P.A.C. (1999). The learning organization ten years on: a case study. The Learning Organization.6.(5):217-223.

Fulmer, R.M. & Bernard, K.J. (1998). A Conversation with Peter Senge: New Developments in Organizational Learning. Organizational Dynamics.27.(2)pp33-43. Retrieved from EBSCO Host database 07/03/02.

Fulmer, R.M. & Gibbs, P. (1998). The Second Generation Learning Organizations: New Tools for Sustaining Competitive Advantage. Organizational Dynamics.27.(2)pp6-15.

Fulmer, R.M. & Sashkin, M. (1995). Tools for the Global Learning Organization. In: Fulmer, R.M. & Gibbs, P. (1998). The Second Generation Learning Organizations: New Tools for Sustaining Competitive Advantage. Organizational Dynamics.27.(2)pp6-15.

Garratt, B. (1999). The Learning Organisation 15 years on: some personal reflections. The Learning Organization.6.(5):202-206.

Garratt, B. (2001). The Learning Organization: Developing Democracy at Work. Harper Collins Business. London.

Garvin, D.A. (1993). Building a Learning Organization. In: Kotnour, T. (1999). A Learning Framework for Project Management. Project Management Journal. 30.(2):32-38.

Hakim, C. (1982). Secondary Analysis in Social Research. In: Harris, H. (2001). Content Analysis of Secondary Data: A study of courage in managerial decision making. Journal of Business Ethics 34.(3):191-208.

Handy, C. (1990). The Age of Unreason. In: Smith, P.A.C. (1999). The Learning Organization ten years on: a case study. The Learning Organization.6.(5):217-223.

Hansen, A., Cottle, S., Negrine, R. & Newbold, C. (1998). Mass Communication Research Methods. New York University Press. New York.

Harris, H. (2001). Content Analysis of Secondary Data: A study of courage in managerial decision making. Journal of Business Ethics 34.(3):191-208.

Harrison, M.I. & Shirom, A. (1999). Organizational Diagnosis and Assessment. In: McIntire, S.A. (1999). Organizational Diagnosis and Assessment: Bridging Theory and Practice. Personnel Psychology.52.(3):786-789.

Hinkin, T.R. & Schriesheim, C.A. (1989). Development and Application of New Scales to Measure the French and Raven (1959) Bases of Social Power. Journal of Applied Psychology.74.(4):561-567.

Hitt, W.D. (1995). The Learning Organization: Some reflections on Organizational Renewal. In: Pegels, C.C. (1998). Handbook of Strategies and Tools for the Learning Company. Productivity Press. Portland, Oregon.

Holsti, O.R. (1969). Content analysis for the social sciences and humanities. In: Hansen, A., Cottle, S., Negrine, R. & Newbold, C. (1998). Mass Communication Research Methods. New York University Press. New York.

Holsti, O.R. (1969). Content analysis for the social sciences and humanities. In: Weber, R.P. (1990). Basic Content Analysis. Sage Publications. Newbury Park.

Hosley, S., Lan, A., Levy, F. & Tan, D. (1994). The quest for the competitive learning organization. In: Rowden, R.W. (2001). The Learning Organization and Strategic Change. S.A.M. Advanced Management Journal.66.(3):11-18.

Huber, G. (1989). In: Argyris, C. (1999). On Organizational Learning. Blackwell Publishers Ltd. Oxford.

Huber, G. (1991). Organizational Learning: the contributing processes and the literature. In: Easterby-Smith, M., Burgoyne, J. & Araujo, L. (1999). Organizational Learning and the Learning Organization: Developments in theory and practice. Sage Publications. London.

Isaacs, W. (1994). The Learning Organization in Action. In: Fulmer, R.M. & Gibbs, P. (1998). The Second Generation Learning Organizations: New tools for sustaining competitive advantage. Organizational Dynamics27(2):6-21.

Isaacs, W.N. (1993). Taking flight: Dialogue, collective thinking, and organizational learning. Organizational Dynamics.22(2):24-40.

Jackson, T. (1993). Organizational Behaviour in International Management. In Pemberton, J.D. & Stonehouse, G.H. (2000). Organizational Learning and Knowledge Assets: an essential partnership. The Learning Organization.7(4):184.

Jashpara, A. (1993). The competitive learning organization. In: Rowden, R.W. (2001). The Learning Organization and Strategic Change. S.A.M. Advanced Management Journal.66(3):11-18.

Juran, J.M. (1988). Juran on planning for quality. In: Kotnour, T. (1999). A Learning Framework for Project Management. Project Management Journal 30(2):32-38.

Keischel, W. (1990). The Organization that Learns. In: Rowden, R.W. (2001). The Learning Organization and Strategic Change. S.A.M. Advanced Management Journal.66(3):11-18.

Korth, S.J. (2000). Single and Double Loop Learning: Exploring Potential Influence of Cognitive Style. Organization Development Journal.18(3)pp87-98.

Kotnour, T. (1999). A Learning Framework for Project Management. Project Management Journal 30(2):32-38.

Krippendorff, K. (1980). Content Analysis. In: Harris, H. (2001). Content Analysis of Secondary Data: A study of courage in managerial decision making. Journal of Business Ethics.34(3):191-208.

Krippendorff, K. (1980). Content Analysis. In: Weber, R.P. (1990). Basic Content Analysis. Sage Publications. Newbury Park.

Levitt, B. & March, J.G. (1988). Organizational Learning. In: Argyris, C. & Schon, D.A. (1996). Organizational Learning II: Theory, Method and Practice. Addison-Wesley Publishing Company. Reading, Massachusetts.

Llewellyn, R.N. (2002). When to call the organization doctor. HR Magazine.47(3):79-83.

Marquardt, M.J. (1996) Building the Learning Organization: A systems approach to quantum improvement and global success. In Korth, S.J. (2000). Single and Double Loop Learning: Exploring Potential Influence of Cognitive Style. Organization Development Journal.18(3):87-98.

Marquardt, M.J. (2000). Action Learning and Leadership. The Learning Organization.7(5):233-240.

Marsick, V.J. & Watkins, K.E. (1999). Looking again at learning in the Learning Organization: a tool that can turn into a weapon. The Learning Organization.6(5):207-211.

McIntire, S.A. (1999). Organizational Diagnosis and Assessment: Bridging Theory and Practice. Personnel Psychology.52(3):786-789.

Mintzberg, H., Lampel, J. & Ahlstrand, B. (1998). The Strategy Safari. Jossey-Bass. San Francisco.

Nelson, R. & Winter, S.G. (1982). An Evolutionary Theory of Economic Change. In: Argyris, C. (1999). On Organizational Learning. Blackwell Publishers Ltd. Oxford.

Nonaka, I. & Takeuchi, H. (1995). The Knowledge Creating Company. In: Poell, R.F., Chivers, G.E., Van der Krogt, F.J. & Wildemeersch, D.A. (2000). Learning-Network Theory. Management Learning.31(1):25-49.

Nonaka, I. (1991). The Knowledge Creating Company. In: Pemberton, J.D. & Stonehouse, G.H. (2000). Organizational Learning and Knowledge Assets: an essential partnership. The Learning Organization.7(4):184.

OECD (1996). The Knowledge-Based Economy. In: Clarke, T. (2001). The Knowledge Economy. Education and Training.43(5):189

Page, C. & Meyer, D. (2000). Applied Research Design for Business and Management. Irwin McGraw Hill. Sydney.

Pegels, C.C. (1998). Handbook of Strategies and Tools for the Learning Company. Productivity Press. Portland, Oregon.

Pemberton, J.D. & Stonehouse, G.H. (2000). Organizational Learning and Knowledge Assets: an essential partnership. The Learning Organization.7(4)pp184.

Poell, R.F., Chivers, G.E., Van der Krogt, F.J. & Wildemeersch, D.A. (2000). Learning-Network Theory. Management Learning.31(1):25-49.

Prange, C. (1996). Interorganisationales Lernen. In: Easterby-Smith, M., Burgoyne, J. & Araujo, L. (1999). Organizational Learning and the Learning Organization: Developments in theory and practice. Sage Publications. London.

Rafferty, A.E. & Griffin, M.A. (2001). Expanding organizational diagnosis by assessing the intensity of change activities. Organizational Development Journal.19(3):3-14.

Ramsey, P. & Sinha, P. (2002). How consultants operate: how to help them do their job. University of Auckland Business Review.4(1):58-69.

Revans, R. (1982). What is Action Learning? In Fulmer, R.M. & Gibbs, P. (1998). The Second Generation Learning Organizations: New Tools for Sustaining Competitive Advantage. Organizational Dynamics.27(2):6-15.

Revans, R.W. (1983). Action Learning: Its Terms and Character. Management Decision.21(1):39.

Revans, R.W. (1983). Action Learning: Kindling the touch paper. In: Rowden, R.W. (2001). The Learning Organization and Strategic Change. S.A.M. Advanced Management Journal.66(3):11-18.

Revans, R.W. (1994). Action Learning: Are we getting there? Management Decision.22(1):45.

Revans, R.W. (1998). ABC of Action Learning: Empowering managers to act and to learn from action. Lemos & Crane. London.

Rieley, J.B. (2001). Gaming the System: Stop Playing the Organisational Game Start Playing the Competitive Game. Financial Times Prentice Hall. London.

Roth, G.L. & Niemi, J. (1996). Information Technology Systems and the Learning Organization. In: Poell, R.F., Chivers, G.E., Van der Krogt, F.J. & Wildemeersch, D.A. (2000). Learning-Network Theory. Management Learning.31(1):25-49.

Rowden, R.W. (2001). The Learning Organization and Strategic Change. S.A.M. Advanced Management Journal.66(3):11-18.

Sarantakos, S. (1993). Social Research. In: Harris, H. (2001). Content Analysis of Secondary Data: A study of courage in managerial decision making. Journal of Business Ethics.34(3):191-208.

Senge, P. (1990). The Fifth Discipline: The art and practice of the learning organization. Doubleday Publishing. New York.

Senge, P. (1997). Communities of Leaders and Learners. Harvard Business Review.75(5):30-32.

Senge, P. (1998). In Fulmer, R.M. & Bernard, K.J. (1998). A Conversation with Peter Senge: New Developments in Organizational Learning. Organizational Dynamics.27(2):33-43.

Smith, P.A.C. (1999). The learning organization ten years on: a case study. The Learning Organization.6(5):217-223.

Sommer, R. & Sommer, B. (2002). A practical guide to Behavioural Research: Tools and Techniques. Oxford University Press. New York.

Stata, R. (1989). Organizational Learning: The key to management innovation. In: Rowden, R.W. (2001). The Learning Organization and Strategic Change. S.A.M. Advanced Management Journal.66(3):11-18.

Tsang, E. (1997). Organizational learning and the learning organization: a dichotomy between descriptive and prescriptive research. In: Easterby-Smith, M., Burgoyne, J. & Araujo, L. (1999). Organizational Learning and the Learning Organization: Developments in theory and practice. Sage Publications. London.

Watkins, K. & Marsick, V. (1993). Sculpting the Learning Organization: Lessons in the art and science of systemic change. In Rowden, R.W. (2001). The Learning Organization and Strategic Change. S.A.M. Advanced Management Journal.66(3):11-18.

Weber, R.P. (1990). Basic Content Analysis. Sage Publications. Newbury Park.

Wijnhoven, A.B.J.M. (1995). Organizational Learning and Information Systems: The case of monitoring Information and Control systems in Machine Bureaucratic Organizations. In: Poell, R.F., Chivers, G.E., Van der Krogt, F.J. & Wildemeersch, D.A. (2000). Learning-Network Theory. Management Learning.31(1):25-49.

Wright, C.R. (1986). Mass Communication: A sociological perspective. In: Berger, A.A. (2000). Media Communication Research Methods: An introduction to Qualitative and Quantitative approaches. Sage Publications, Inc. Thousand Oaks.

Yarrow, D.J. & Prabhu, V.B. (1999). Collaborating to compete: Benchmarking through regional partnerships. Total Quality Management.10(4/5):793-802.

ORGANISATION WEBSITES

Carter Holt Harvey. www.carterholtharvey.co.nz

Fletcher Building. www.fletcherbuilding.co.nz

Fletcher Challenge Forests Ltd. www.fcf.co.nz

NZSE (New Zealand Stock Exchange) www.nzse.co.nz

Property for Industry Ltd. www.pfi.co.nz

SKY Network Television. www.sky.co.nz

Telecom New Zealand. www.telecom.co.nz

TrustPower Ltd. www.trustpower.co.nz

United Networks. www.unitednetworks.co.nz

Waste Management. www.wastemanagement.co.nz

APPENDIX 1

The following appendix highlights the initial coding sheet produced and used for stage one of the pilot study. Please note that after conducting the pilot study this was revised (see appendix 2) and therefore is not the coding sheet that was used for data collection.

ID Number: V2 V2.1 V3 V3.1 V3.2 V4 V4.1 V4.2 V4.3 V5

Tenet	Variables	Decision Points for variables 1-3 1. Specific Evidence	2. Non Specific Evidence	3. No Evidence	**Ratings:**
2V2	**Reactive Learning** Reactive Learning - an organisation becomes aware of change(s) or problem(s) and reacts with corrective action(s).	Does the organisation specifically demonstrate its ability to identify and rectify a problem or inefficiency? Example 1: The events of Sept 11th has meant turmoil in the airline industry. Here at Air ABC we have responded to the sudden loss of revenue by reducing the price of domestic flights to try and entice customers.	Does the organisation generally demonstrate reactive learning? Example 1: The events of September 11th has meant turmoil in the airline industry. Here at Air ABC we have had to deal with the sudden loss of revenue.	There is no evidence of reactive learning	_____
2V2.1	**Proactive Learning** Proactive Learning - an organisation becomes aware of change(s) (current & future) and assesses the consequences of the change(s) before determining strategic direction.	Does the organisation specifically demonstrate its ability to utilise past experience and futuristic thinking to determine future direction? Example 1: Air ABC plans for the future. In the wake of Sept 11, ABC reviewed its options and implemented a consumer confidence programme, which entailed fundamental change to routes and stop over destinations.	Does the organisation generally demonstrate being proactive? Example 1: Air ABC prides itself on planning for the future especially due to the dynamic nature of the airline industry.	There is no evidence of proactive learning	_____

3V3	**Prior research, analysis and preparation** Past events and experiences are continuously examined and reviewed to assist future decision making?	Does the organisation specifically demonstrate its ability to review prior experiences before implementing action? Example 1: Air ABC before deciding on what action to take in regard to consumer confidence reviewed its knowledge of this area and examined results of previous experiences with confidence based strategies.	Does the organisation generally discuss research and analysis of prior actions implemented? Example 1: Air ABC before taking action in regard to consumer confidence, reviewed and examined previous experience(s).	There is no evidence that the organisation performs prior research and analysis before taking action.	_____
3V3.1	**Experimentation and questioning** During implementation of specific action, continuous experimentation and questioning of this action occurs to ensure 'best practice' is adopted.	Does the organisation specifically discuss experimenting with and questioning current actions? Example 1: Air ABC uses 'focus groups' throughout the organisation that discuss and trial strategies in use. This acts as a feedback mechanism to ensure the organisation adopts best practice.	Does the organisation generally discuss experimentation and questioning of actions? Example 1: Air ABC has systems in place that provides its members with the opportunity to question and trial actions.	There is no evidence that the organisation questions and experiments with an action.	_____

3V3.2	**Review, understand and act** After implementation of specific action(s), the outcome(s) are reviewed and the consequences understood before further action is taken.	Does the organisation demonstrate specific evidence that it reviews its actions and assesses the consequences before taking further (future) action? Example 1: After implementing the consumer confidence programme, Air ABC found revenues had increased slightly, consequently this programme was found to be too costly relative to returns.	Does the organisation demonstrate general evidence that it assesses Outcomes of actions? Example 1: After implementing the consumer confidence programme, Air ABC reviewed its outcome relative to revenue.	There is no evidence that the organisation reviews and understands prior actions before implementing current actions.	_____
4V4	**Emphasis on Communication** Communication Systems capture, share and embed knowledge throughout the organisation.	Does the organisation specifically demonstrate evidence of placing great importance on communication systems? Example 1: Air ABC encourages inquiry and dialogue across the organisation and to support this have developed an intranet available to all members.	Does the organisation talk generally of communication? Example 1: Air ABC encourages communication across the various functions of the organisation.	There is no evidence of the importance of communication systems	_____

4V4.1	**Less Autocratic** The movement away from command and control, pyramid-like hierarchies to a flatter organisational structure.	Does the organisation specifically discuss a flatter, less autocratic structure? Example 1: Air ABC identified that knowledge of its members is a core competence. To strengthen this, ABC has restructured the organisation, removing layers of middle management to flatten overall structure and reduce autocracy.	Does the organisation generally discuss a flatter structure? Example 1: Air ABC identified that knowledge of its members is a core competence. To strengthen this ABC has reviewed its structure relative to the ease of communication across the organisation.	There is no evidence of the organisation being less autocratic	_____
4V4.2	**Supportive Culture** Supportive Culture - providing a safe and trusting environment.	Does the organisation demonstrate specific evidence that they have a supportive culture that promotes learning? Example 1: Air ABC supports learning and knowledge sharing by ensuring all key management spend 8 weeks of the year in other related functions of the organisation to better their understanding and gain new knowledge.	Does the organisation generally mention a supportive culture? Example 1: Air ABC supports learning and knowledge sharing amongst members of the organisation.	There is no evidence of the organisation having a supportive culture that promotes learning	_____

4V4.3	**Leadership Style** Leadership Style - movement away from directive leadership to servant leadership that coaches, mentors and empowers staff.	Does the organisation demonstrate specific evidence that its leadership is supportive rather than directive? Example 1: As knowledge is a true competence within the environment today, leadership at Air ABC is aligned with the need to encourage and entice members to allow for creativity.	Does the organisation talk generally about supportive leadership style? Example: As knowledge is a true competence leadership at Air ABC is geared more towards encouragement rather than control.	There is no evidence of supportive leadership.	_____
5V5	**Learning how to Learn** How to learn - the organisation examines and reviews learning to find the underlying reasons as to why it learns in a particular way.	Does the organisation specifically demonstrate its ability to assess how it currently learns? Example 1: Air ABC reviews the way in which it learns by holding management feedback sessions in which we look at why we act in certain ways and why we set certain goals for the organisation?	Does the organisation generally discuss learning how to learn? Example 1: Air ABC reviews the way in which it learns by looking at why we have learned certain lessons?	There is no evidence that the organisation examines the way in which it learns.	_____ _____

APPENDIX 2

This appendix shows the coding sheet used for data collection, different to that seen in appendix 1, having been revised due to the outcomes of the pilot study that highlighted the need to revise the coding sheet as to ensure 'ease of use'.

Annual Report for: V2 V2.1 V3 V3.1 V3.2 V4 V4.1 V4.2 V4.3 V5

ID Number:

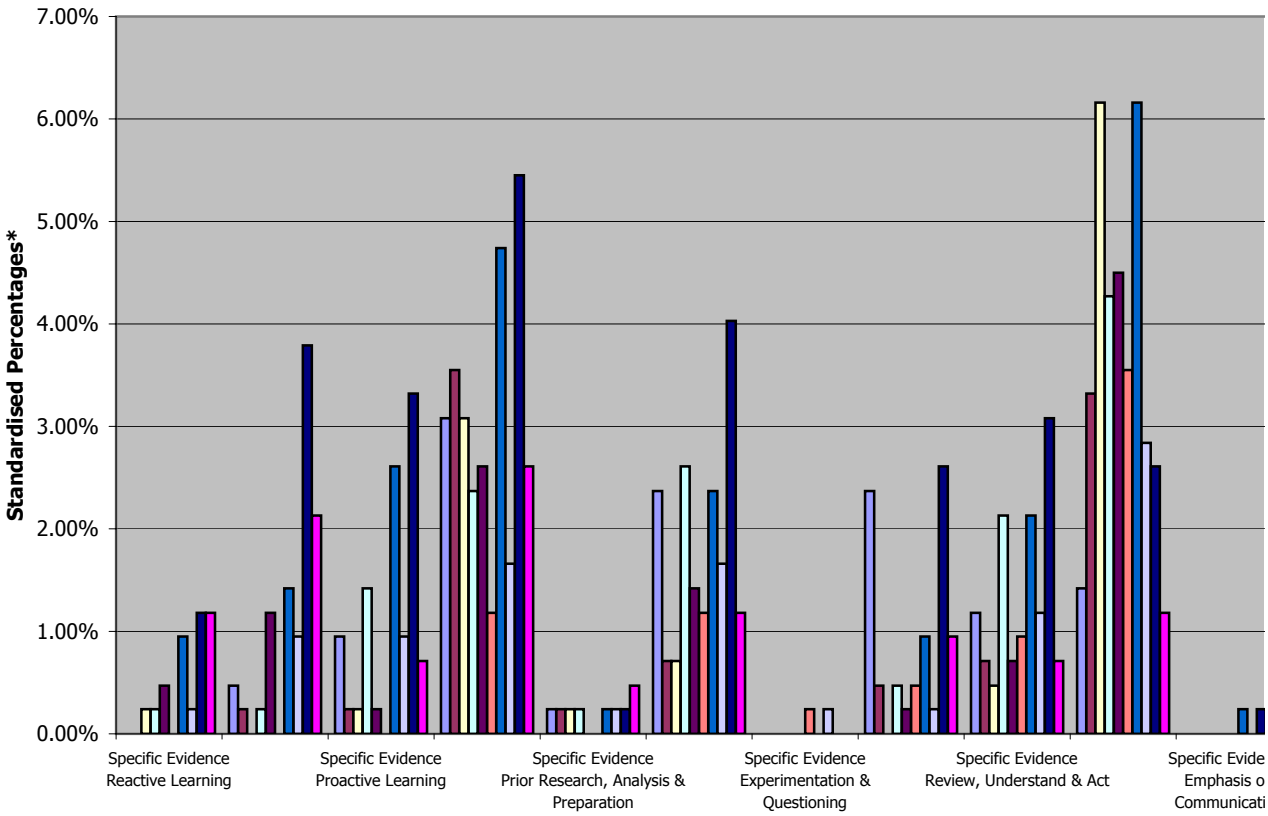
Variables

V2	**Reactive Learning**	Is the organisation aware of change(s) / problem(s)?	Y / N
	Reactive Learning - an organisation	Does the organisation react to this?	Y / N
	becomes aware of change(s) or	Does the organisation explain its actions specifically?	Y / N
	problem(s) and reacts with	*e.g. Specific = 'recapitalisation proposal' to improve financial position*	
	action(s).	*General = proposal*	
V2.1	**Proactive Learning**	Is the organisation aware of change(s) / problem(s) (Current or Future)?	Y / N
	Proactive Learning - an organisation	Do they assess the consequence of this change before taking action?	Y / N
	becomes aware of change(s) (current	Does the organisation specifically discuss the consequences of change?	Y / N
	& future) and assesses the	*e.g. Specific = influences consumer behaviours therefore effects revenue*	
	consequences of the change(s)	*General = this could effect revenue*	
	before determining strategic		
	direction.		
V3	**Prior research, analysis**	Does the organisation review & analyse past events and/or experiences?	Y / N
	and preparation	Do they use this knowledge to assist decision making?	Y / N
	Before action, past events and	Do they specifically discuss the review / use of past events / experiences?	Y / N
	experiences are reflected upon	*e.g. Specific = previous experience of price wars taught us that to compete we must follow trend*	
	to assist the decision making process	*General = we reviewed our past experiences of this before taking action*	
V3.1	**Experimentation and**	Does the organisation question / experiment with, actions taken?	Y / N
	questioning	Do they discuss 'best practice'?	Y / N
	During action an organisation	Do they specifically explain the questioning / experimentation process?	Y / N
	experiments with and questions the	*e.g. Specific = focus groups used to trial current strategies act as a feedback mechanism*	
	action taken to ensure best practice	*General = strategies are trialed and tested*	
	is being adopted.		

V3.2	**Review, understand and act**	Does the organisation review the outcome(s) of action taken?	Y / N
	After action, the outcome(s) of the	Do they discuss the consequences of this action?	Y / N
	action(s) are reviewed and the	Do they specifically explain the consequences?	Y / N
	consequences understood before	*e.g. Specific = the org found that this increased customer base but reduced service levels to key customers*	
	further action is taken.	*General = the consequences of this were minimal*	
V4	**Emphasis on Communication**	Does the organisation discuss the importance of communication?	Y / N
	Communication Systems capture,	Do they discuss the importance of knowledge sharing?	Y / N
	share and embed knowledge	Do they specifically discuss how they capture and share knowledge?	Y / N
	throughout the organisation.	*e.g. Specific = the intranet system in place allows information to flow freely across the organisation*	
		General = we encourage knowledge sharing across the organisation	
V4.1	**Less Autocratic**	Does the organisation review its structure?	Y / N
	The movement away from command	Do they discuss having a flat, less autocratic structure?	Y / N
	and control, pyramid-like hierarchies	Do they specifically discuss how / why they flattened their structure?	Y / N
	to a flatter organisational structure.	*e.g. Specific = by removing layers of middle management we have increased our ability to share knowledge across the organisation*	
		General = we reviewed our structure with the aim of assessing ease of communication	
V4.2	**Supportive Culture**	Does the organisation discuss its culture?	Y / N
	Supportive Culture - providing	Do they believe the culture supports the individuals within the organisation?	Y / N
	a safe and trusting environment.	Do they specifically discuss how they provide a supportive environment?	Y / N
		e.g. Specific = management spend 8 weeks in other functions to better their understanding and gain new knowledge	
		General = we support all learning within the organisation	
V4.3	**Leadership Style**	Does the organisation review leadership style?	Y / N
	Leadership Style - movement away	Do they discuss coaching, mentoring and empowering of employees?	Y / N
	from directive leadership to servant	Do they specifically discuss servant / supportive leadership?	Y / N
	leadership that coaches, mentors	*e.g. Specific = leadership is aligned with the need to encourage and entice creativity amongst all members*	
	and empowers staff.	*General = supportive leadership, rather than controlling is key*	

V5	**Learning how to Learn**	Does the organisation assess how it actually learns?	Y / N
	How to learn - the organisation examines and reviews learning to find the underlying reasons as to why it learns in a particular way.	Do they specifically discuss the reasons why it learns in a particular way?	Y / N
		e.g. Specific = we learn this way due to our tendency to thoroughly analyse actions and decision making in efforts to ensure best practice is adopted across the entire organisation	
		General = we learn this way because of the goals we set	

Figure 4.4 Ov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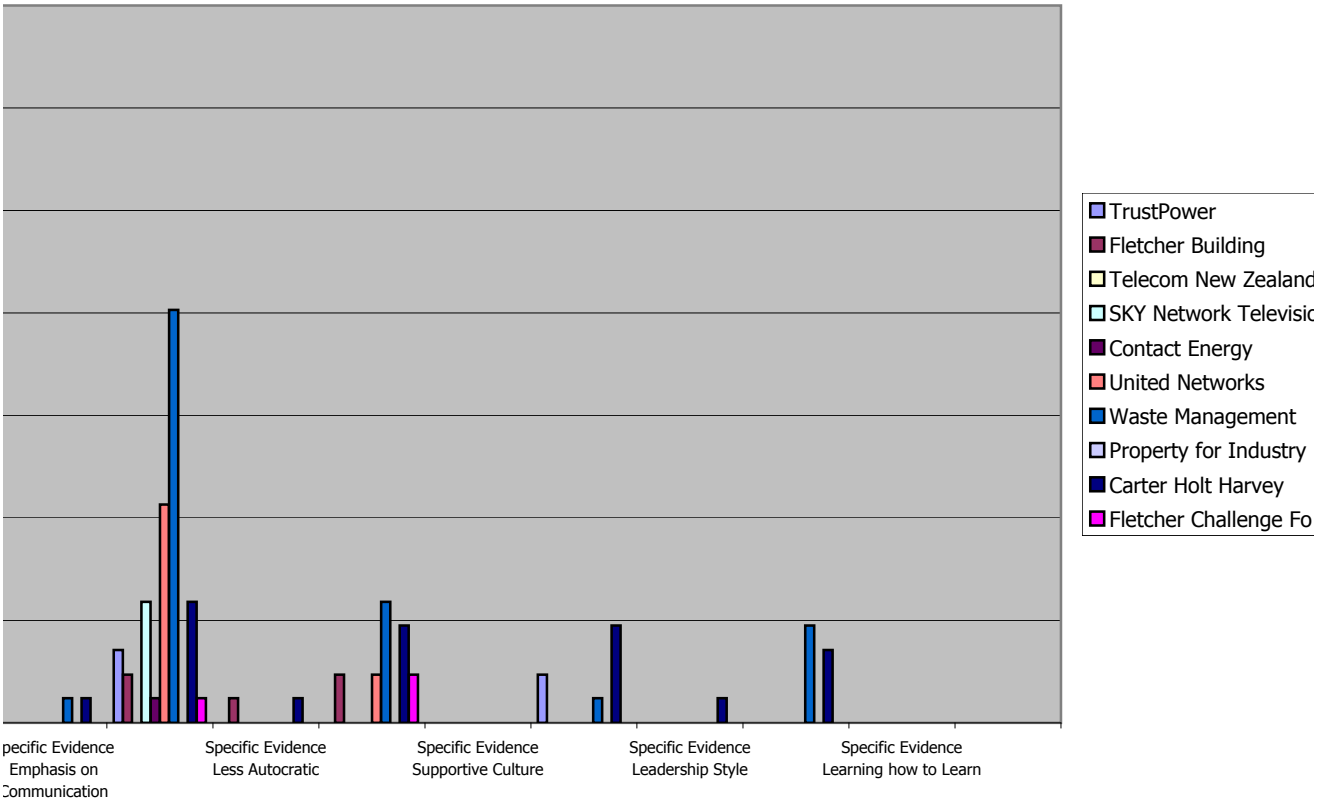
.4 Overall Findings



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